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Current Notes

Vol. 7 No. 4 May 1987

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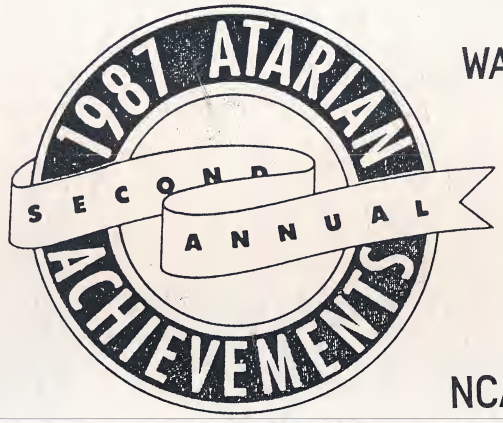

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ATARI®

Your Monitor on the World of Atari

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REGULAR FEATURES, NEWS AND COMMENTARY

PRODUCT REVIEWS

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EDITORIAL:

Last week I received a letter from ANTIC magazine. Let me share it with you:

Dear Mr. Waters,

Antic Magazine is pleased to present you with your 1987 Antic Award for your Atarian Achievement. This is the second year that Antic has presented these awards in recognition of outstanding contributions to the Atari community. As Antic enters its sixth year, we continue our commitment to following our industry and keeping our readership informed on innovative developments wherever they occur.... Congratulations, and we're looking forward to fur- ther developments from your group.

Yours truly,
Nat Friedland
Editor, Antic Magazine

As many of you are aware, ANTIC's May issue listed their 1987 Atarian Achievement Awards. Twelve companies were given awards for Outstanding Products including our friends at XLENT for their *First XLEnt Word Processor*. Tom Hudson was chosen Programmer of the year and WAACE was chosen the Outstanding Users Group. Here's what ANTIC had to say about WAACE:

"...WAACE (Washington Area Atari Computer En- thusiasts) is a pioneering regional federation of nine Atari users groups serving some 1,500 members in the nation's capital, Virginia and Maryland. WAACE is the vehicle for these clubs to coordinate their efforts in a number of major regional activities -- which serve as an important model for other area-wide affili- ations of Atari groups."

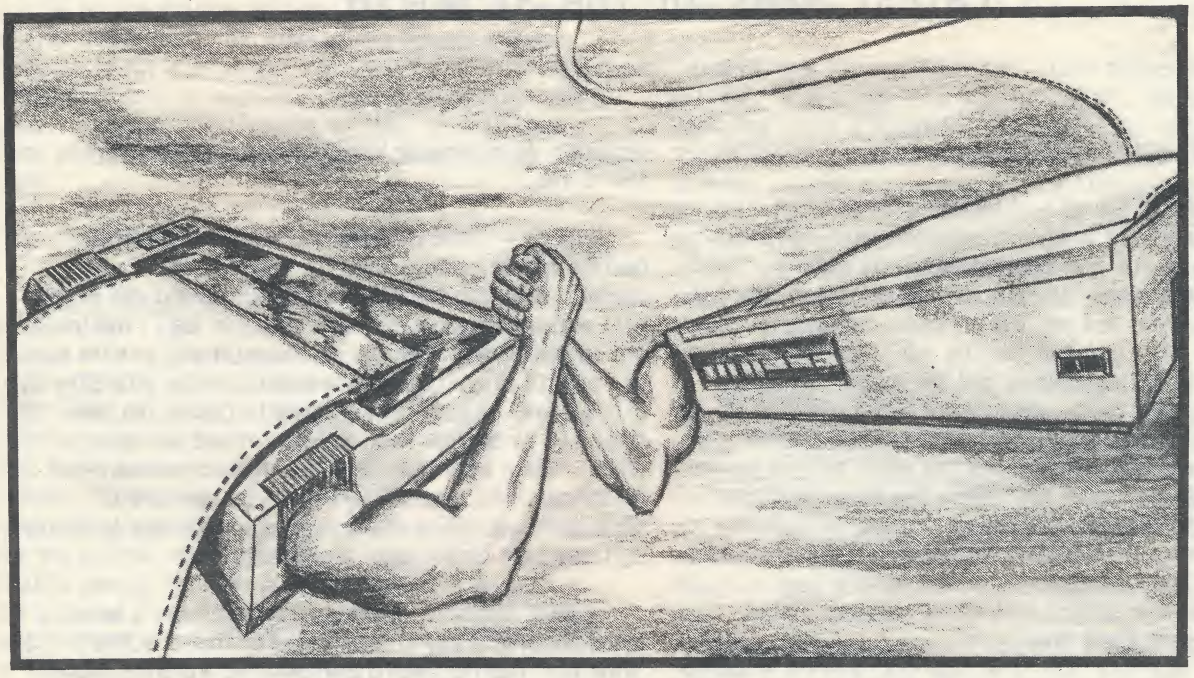
"WAACE publishes an ambitious monthly magazine, Current Notes, that is sold commercially in local stores. WAACE has also organized suc- cessful regional Atari festivals since 1985. NOVATARI, the largest club in WAACE, operates an area-wide bulletin board, ARMUDIC, that largely pays for itself by charging small subscription fees to all users. WAACE has shown the way for local users groups to band together and produce large scale results."

I'd like to take this opportunity, on behalf of all the WAACE members, to thank ANTIC for this award. All club members can be justifiably proud of the achievement. Other cities have tried to emulate what we have done here in Washington, but it is often easier said than done. As I start my fourth year as Editor, I can assure you that Current Notes could never have grown to its current position and reputa- tion without the continuous and solid support from contributors drawn from all of the clubs.

Similarly, the success of Atarifest last year was due in no small part to the cooperative effort of each of the clubs that worked so diligently to bring you that event. Georgia Weatherhead, President of NOVATARI, has already been working with other WAACE clubs to prepare this year's Atarifest (see article on page 61). I hope all of you will continue working together to insure another successful year.

In recent months, WAACE membership has been declining. Although no specific study has been undertaken to determine why members are not rejoining their clubs, part of the reason may be a general feeling that the club is not as satisfying an experience as it used to be. If you find yourself in this position, let me leave you with this thought. About three and a half years ago, I, too, was dissatisfied with my club's meetings. I didn't find them worth the time and effort of attending. I was faced with two options: quit going or fix them. I chose the second option and volunteered to take over as program chairman. I later assumed the role of newsletter editor and then, for a period, Novatari president. Although it has been, and remains, a great deal of work, I think I have made a difference. What's more, I have gained much personally, both through the experience and through the many friends that I have made. So, if you are considering dropping out because your club is not doing what you want it to do, remember, you have two choices.

When Printers Get Down to Business



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Typesetter $34.95 By Dorfman & Young * †

Get design freedom to create letterhead, posters, title pages, and more. Use the joystick or keyboard driven sketch pad to create and place clip art, logos and graphics anywhere on a page. Loads of graphic, 7+/8 and Printware Series files and lets you control your printer, practically down to every dot on the page! Produce results that look almost professionally typeset. 48K/128K disk

Megafont II+ $24.95 By Dellinger & Rognlie * †

A complete program lister and graphics dumper. This utility is used by most national Atari magazines to print out program listings for publication; but it's much more. Print graphics, 7+/8 and Koala screens, and Printware Series files in multiple sizes. Type direct from the keyboard to the printer in your own custom created fonts or one of the 17 fonts that can be down loaded to your printer. 48K disk

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A value-added Print Shop™ interface utility that raises graphic output to new levels of clarity and compatiblity. Integrate Typesetter icons with Print Shop™ fonts and graphics. Convert Print Shop™ fonts to Typesetter icons and select from our four sizes of output. Design custom Print Shop™ fonts and graphics with the P.S. Interface drawing program. 48K disk

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A layout utility that lets you plan an 8½"×11" page on your screen and then print it. Mix text, graphics and Typesetter fonts for fantastic two-column newsletters. Two text modes; 40 column allows any Atari character set, 80 column puts twice as much information on the same page. Page Designer works with other Printware Series software. 48K disk

Rubber Stamp $29.95 By Dorfman, Young & Dellinger *

A collection of XLEnt creative utilities that let you build a library of high resolution icons, including converted Print Shop™ icons. Create up to four icons at once, and use the only 16×16 character set and text editors available for your Atari. Control the height and width of characters to get 32 different character sizes. Print up to 99 graphic labels with the special label printer. 48K disk

1st XLEnt Word Processor $29.95 By Castell

A fully featured, friendly and fast word processor. 1st XLEnt Word Processor uses a joystick and icon interface, has toggle between full-screen windows, and a very readable 80-column print preview to see what your document will look like. According to Antic Magazine's January '87 review, 1st Word is, "As good or better than any other word processor you'll find for the 8-bit Atari". 48K disk

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ST UPDATE

Latest News in the ST World

by Frank Sommers

TRUST AND THE MARKET PLACE

Are the Polls Wrong? -- Limited polls about Atari and Jack Tramiel are producing results almost identical to the polls on the Presidents credibility and popularity, where the latter's word is not trusted by 65% of the people, and yet 66% of these same people believe he's the right man for the job. (Admittedly the size of our poll is minuscule and the margin for error large.) But uncertainty about where the leadership of Atari is taking the company and our favorite product mounts by the month. Barely was the bloom off the new product announcements at CES before the first vestiges of doubt began to produce blossoms. Disappearance of the $499 version of the Atari PC helped trigger the mud slide. Now that spring is fully here so are the mounting convictions that what Atari says has little relation to what Atari does.

HARDWARE

Laser Printer -- The hardliners among the skeptics say that while the laser printer was admittedly a little wispy when it was announced, with minimal data about how it was to be configured, and no date for appearance, lately the laser printer has been coming out of its cocoon and transforming itself from vaporware to nowhere. No contacts have been agreed upon for the much discussed Atari desktop program. How long does it take to produce a new and innovative desk program? System Three in Canada has been working on one for the ST for 2 years. Even with the top of the batting order from Batteries Included coming over to give it a boost, it is not for this quarter. How long then before Atari can have a program to run on their laser printer? Tales from the Tramiel woods would have us believe that "everything is all of a package", and the Megas will appear, along with the blitter, and right behind if not along side will be the laser printer and over in the other corner with a puff of smoke will appear the PC line.

What are the facts, or the nearest thing to them? The laser printer is unlikely before Xmas! Remember the CD ROM? The market and the price never collided in Atari's mind and the project is on a shelf somewhere waiting. The laser faces the same uncertainties. Then, if a one-man market survey concludes the desktop market is there and if the software driver materializes, then the ok for production would be forthcoming. But the production cycle is three months long, and no one has yet confirmed that Jack has ok'd production. The blitter chip, you remember, was declared ready to go last November, but wasn't ok'd for factory treatment until January. As of this writing, it has not been seen in the stores.

MEGA ST -- Here the news and whispers is better. Dealers are being told that the MEGA ST, the 1 meg upgrade chips for the 520 and 1040 ST's, and the blitter will all arrive about the same time, in May. The boats are in the harbor, FCC approval's obtained, and the band is ready to play. Production models of the MEGA ST with blitter have already been shipped to Canada (we have talked to no one who has seen the production model there), along with the Atari PC. How do you sum this? Positively. By June you should be seeing them at dealers around you, minus the printer that was to be the critical part of the desk top package.

IBM Emulators -- A distillation of what's been heard and what's being said suggests that the Atari "blue box" has not been discarded, but with the advent of new emulator products who's to say it won't be. Paradox Software is releasing a beta version 2.0 of its IBM emulator MS.EM. This according to Paradox will cure the bugs in the original version. Avant Guard Systems, owned by the Teals in Jacksonville Florida will market a software emulator at the end of May that once booted in your drive will turn your ST into an IBM PC running at 80% the speed of the ST with 99% compatibility. (Ginny Teal, one half of the partnership with husband William, suggested, "99% is correct, but you better say 95% we'd like to be conservative about this.) They have tested 400 or so pieces of IBM software and found only BASIC A, because it uses special IBM code, will not run on the emulator. All of the "toughies", *FLIGHT SIMULATOR, SIDEKICK, MULTIPLAN, DBASE III, LOTUS 1-2-3, SYMPHONY, ENABLE, DOLLARS AND SENSE*, etc., will. IB Computers of Portland, Oregon has agreed to make the 5.25 drives for the ST, for those who chose not to port software over to their 3.5 drives. The program called *PC-DITTO* will cost $89.95; Avant Guard Systems, Pablo Point Dr., Jacksonville, FL 32225.

8-Bit Emulator -- Some of you have seen, briefly, an 8-bit emulator up on the BBS's, for a day maybe. Reportedly it was put there to get Atari's attention, who for 3 months or so had declined to answer the author's calls, letters, etc. Finally there was a reply, the day after the BBS appearance. . A copy of the emulator program, for running basic language 8-bit ware on the ST, was sent, and subsequently lost by Atari. Hopefully, negotiations continue. Reportedly all the author wants to do is make the program available in the public domain. If this is true, one wonders, does Atari have a case of that perilous computer disease, "If it isn't invented here it doesn't exist"?

PC and Others -- The Atari PC will be shown in quantity at the June CES in Chicago and two weeks later will be on the dealers shelves. The TT (thirty- two bit) is scheduled to be shown at the November Comdex. Niel Harris has stated that the Enhanced ST with better "resolution than we currently have in monochrome" and TT capability is still alive and waiting. It will be a stand alone machine. Are these two items one and the same?

ATARI VS SOFTWARE

Did We Mean What We Said? -- The Denver Rocky Mountain Atari Fest may have been the most successful show to date. Only a couple of months old, it brought together half-a-dozen clubs and exposed them to "the truth" (See Niel Harris report in the issue). The Atari technical rep who participated in a major seminar was as good a spokesman as Atari has fielded to date. He offered, in the new Soviet style of openess, unfettered information on compatibility problems with old software and the blitter chip. Except for golfers who may have trouble seeing the club swing because of the speed of the graphics, nothing of consequence. (CN Golf Team, keep the blitters off your machines if you want to stay on the team --next tournament end of May.) He explained, without fear of being fired, why Atari had moved the power switch on the 520ST to the position it has on the 1040. He admitted that the IBM emulator box from Atari was "still being worked on", acknowledging that it should interface with the cartridge port on the ST? A spokesman of unfettered info. Niel Harris followed him in, as you read elsewhere in Greg Anderson's remarkable rendition, an outstanding unburdening of "Things You Wanted to Ask But Never Got Answers To". The result? Attendees said it was hard to improve on. Consequence? Word from the underground is that Atari, possibly on Harris' recommendation, has decided to unburden themselves, and drop out of Atari fairs. Watch for fairs in Dallas and Seattle in May to verify this.

What does Atari say? "Support of user groups is one of our major priorities." What do they do?

IMG Scanner -- The "outer space" device, cited in the last issue, that would scan any picture, document, graphic, etc., and move it into your computer's memory for manipulation, has appeared recently, or its product has, on CompuServe. Several screens have been downloaded by various readers, and the general comment is "I could hardly believe my eyes, the quality was so remarkable." Soft Logic has acquired the scanner, which in early form was selling by Seymor-Radix for $59.95. Soft Logic will package the product with *PUBLISHING PARTNER* and possibly service the early orders, turned over to them, at the original price. PP has proven itself to be an outstanding customer-support company, and alliance, therefore is good news to those of us interested in incorporating a scanner into our systems. Lastest reports from people who had been using the proto-type version were that the results are best in low resolution. A footnote: Soft Logic will be distributing fonts for the PP from the Font Factory of Phoenix.

Unix, the PX, and Fleet St -- Dave Beckmeyer is willing, is writing? Unix 5.3 for the ST. Market? Ma Bell pays circa $10,000 for its terminals. With Unix 5.3 on the ST a rather inexpensive replacement would be at hand. Autumn will see ST's in military PX's here and abroad. *1ST WORD* will be marketed by its British parents in the U.S. and Canada and not by Atari. *FLEET STREET PUBLISHER* is reportedly powerful, if not as practical as *PUBLISHING PARTNER*, but it will not support a laser printer.

Batteries Included -- EA bought most of BI's fixed assets, inventory and artists contracts. The BI unborn product that has been most mourned and wondered after is *PAPER CLIP ELITE*. One of its two authors, Dan Moore, has reportedly received a contract offer from EA, which may not be significant enough for him to accept and to continue working on the project. Much of the inordinate delay is said to accrue from problems with GDOS. Though Atari and Len Tramiel maintain that GDOS is "finished", released, and out there and working, *PUBLISHING PARTNER*'s authors, for one, will tell you that that ain't neccessarily so. (They had to design their own version of GDOS in order to bring PP to the market.) PCE could be out "in several weeks" if it chose to forego GDOS and be Epson only compatible. PCE has been billed as "the best"; to be that it requires GDOS to achieve its outer limits. If you load the current beta version of PCE with the current GDOS, the latter gobbles up 500K, leaving PCE naked on the beach before the first page is typed. Once again is, "What Atari says about a new product, have any bearing on what it is when it finally appears?"

THE BOTTOM LINE

So why the antagonism out there to what Atari is doing for us and the country? It may be caused, partially, by fear. Fear that the machine, old and new owners find so easy to dedicate themselves to, that somehow this machine may not survive. A glance at 8-bit owners and both the syndrome and the possibility are credible. Thus we, who are accussed of being the most sophisticated hackers in the computer trade, and the deadliest, to software companies, of pirates, are equally alert to what we consider to be missteps in the directing of our computer's future. Decisions like the one that "emulators have only minimal markets" from Jack and Co. antagonizes us. Yet, after we have seen and used the emulators we grow bored. Minimal market?

So while you don't like being mislead, and you know that while politicians can get away with it, CEO's and their companies don't over the long haul, later on we are pleased, if we conclude we have been well led. While the jury may or may not still be out on the President, it clearly is on Jack Tramiel and Atari.

WHY DON'T WOMEN LIKE COMPUTERS?

by Dave Small

All right, I'll do it. I'll ask a completely unsocial, very possibly sexist and chauvinist question.

Why don't women like computers?

Now, I realize that this leaves me open to charges of sexism and so on. But that doesn't change my curiousity.

At the local user groups I attend, there are usually about 30 males and 1 (or no) females. At the bigger user groups, there's may be two -- usually someone's daughter and someone's wife with a Patiently Suffering Expression. (You know that expression. It's something like the expression men have while trying on clothes, shopping for antiques, or making house payments.)

Okay, why is this?

Now, let's toss out, right now, the stories we all know that can be used to derail the question. Yes, I've met a few women in data processing departments. Yes, I know women can be just as good at programming. Yes, yes, yes. There *are* exceptions.

Which only proves the point, because we all know they are exceptions. Why that obvious, intense 30:1 ratio?

I put the question to my wife, Sandy. As "David and Sandy Small", we wrote a number of computer columns together, and did a lot of programming. She has a Computer Sci degree.

She didn't know. What she does know is she's tired of computers, burned out on them. She told me what she doesn't understand is why I'm still interested in them after all this time. Or, as she put it, "The question is not why women aren't interested in computers. The question is why men are interested in them to the degree they are."

Hmmmm.

I asked "Barb" (a pseudonym), the women who helps us out at the Data Pacific office. We were sitting at the Denver Atari Expo, watching lots of men and an occassional Suffering Wife in Tow walk by.

"Why don't women like computers?", I said.

She looked around to make sure no one was listening, especially no Maddened Feminists. Then, she said, "Well, I think it's just different sides of the brain. Women don't like math as much as men do. I think women are more attuned to feelings and emotions, that computers don't have. I think computers are boring."

Mind you, if *I* said that in this column, they'd find my tarred and feathered body in the morning, my hands tied behind my back with a bra strap.

Which leaves me understanding exactly nothing.

One more try: Cassie Stahl. She used to help with technical support at Atari. Okay, Cassie, why don't women like computers?

"I don't know. Maybe it's societal conditioning. Women aren't supposed to like them. But I really don't know if that's it at all. My friends who are women aren't interested in them."

Zero for three.

Does anyone know?

I do know that if someone can overcome being shouted down, and study this phenomenon, they might have a real handle on some of the differences between men and women. It might provide some badly needed insight. Despite the screams of "discrimination", there are lots of openings for women in DP departments across the country, and more openings than applicants. Just ask any personnel person who's trying to keep the Affirmative Action people off their case by hiring women. "You! You're female! You have a degree in... I don't care! Do you know 'C'? Great, you're hired!"

I also read the many intelligently written appeals by women looking for Mr. Right. They complain of the few number of single men available, of how bad the bar scene is, and so on. "I never meet any bright men, who can have an intelligent conversation".

Have any of them thought of going to the local user's group meeting, where it's guarenteed they will receive a great deal of attention? Just a thought. Anything female coming to a user group, asking "Can someone answer a question for me", would receive more interest than Cybill Shepherd.

Me, I still don't know. I see the phenomenon. It's stayed the same since 1976, when I went to college in Computer Sci, and there were about four women in the whole department. (I married one of them).

So, if you're looking for an answer in this column, I haven't got one. I do, however, have the question.

Maybe women have a saner view of computers. As the former head of Atari's User Group Support told me: "I never go to user's groups. Computers are tools, like

(Continued on Page 9)

8-BIT, 16-BIT, STAND UP AND HOLLER

by John Barnes, AURA President

Atari user groups have been under a certain amount of strain since the 16-bit products became an important part of the Atari world. The leadership of Novatari and AURA is heavily into ST machinery. Some of the 8-bit folks are getting a bit testy, and they are starting to count pages in Current Notes to buttress their claims that they are being ignored. The leadership of the groups is bending over backwards to accommodate the older interests, but the struggle becomes more difficult daily.

I can understand the siege mentality that many of our older members seem to exhibit because they are under siege. They are being besieged in a marketing war that says "new is better". They are being besieged by slick sales artists who want to maximize the rate at which their own pockets are being filled. This is known as "Capitalism" and, like the Force, it has a dark side - obsolescence in the name of Progress.

This is doubly a shame because the maturation cycle for software and peripheral hardware is much longer than that for the computers themselves. Exciting products like Turbo Basic and Sparta DOS will not get the recognition they deserve. Upgrades to 8-bit hardware migrate to the back burner because the new challenges are potentially more lucrative.

The slick salesmen are fulfilling genuine needs. "Power without the Price" is much more appropriate today than it was 5 years ago or even 2 years ago. If we allow for some stupidity along the way it will be even more true five years from now.

As the elected leader of a user group consisting primarily of 8-bit people I find myself faced with a dilemma. "How can I deal with the things that I find interesting without alienating friends?" This article does not give any answers because I do not have the answers.

From my vantage point I foresee an alarming future for Atari User Groups: (1) We can expect heavy losses in 8-bit membership as meetings, libraries, and the market become less interesting, (2) Our efforts to bring in new blood will become more difficult as the products we serve battle uphill to make inroads against entrenched, if inadequate, "industry standards", (3) Our role as the chief source of public domain software will diminish as other media compete in distributing it.

These trends are already underway, we have to recognize their causes and compensate for them. We can exert more effort or we can shift roles.

Finding excitement in the 8-bit world takes more effort than it used to. Once upon a time stores actively promoted new hardware and software. The creative juices of programmers were stirred by new games and techniques. Those bits of excitement are few and far between these days and someone else will have to find them.

I promise that AURA will give prominence to anything that is exciting. Those who want to show us boring stuff will seal their own fate. If the search for excitement is harder that means more people will have to help with it. We can no longer simply serve up an appetizing menu to passive consumers.

In exploring new roles for the groups we should recognize that there is a serious need for teaching people how to use the new machines and the new software. We tried teaching for the 8-bit world, but we may have waited too long. I think this is something the user groups can do well and find rewarding, both financially and psychologically, but we have to start on it before it is too late.

The more adventurous among us can also help each other to learn. There are many new techniques to be explored and there are new areas to apply the experience we have. I hope that we can expand this learning role within a spirit of comradeship.

In closing, I want to warn some of the 16-bit people against smugness (even outright arrogance) as they watch the struggles of their 8-bit brethren. They might as well start preparing for the day when a new generation of techies will ride rough shod over them. A little tolerance is a wonderful thing to acquire.

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WOMEN (Continued from Page 8)

toasters. When was the last time you went to a toaster user group?"

Could be.

If you'd care to write me, expressing your opinion, I'd really like to hear it, especially the female point of view. Perhaps I can gather some ideas and do a future column on what readers think. (Let me know if you need to be anonymous and if I can quote you.)

Then again, maybe only men out there will read this, in which case, I'll stay puzzled.

Here's a mail drop:
Dave Small,
9678-B E Arapahoe, #133,
Englewood, CO 80112.

Thanks -- Dave Small

RECENT ST RELEASES

by Andy Nicola

Recently released ST software will be the only topic of this column. No "Vaporware" and no press releases. Only real titles that have hit the marketplace and that you can buy now! These titles will be new enough that neither you nor your dealer may have heard of them. Although all titles will appear on my "Official ST Software List" which is posted on CompuServe, the WAACE BBS, and in the Current Notes Disk Library (#116), some of them will appear here for the first time. These Current Notes exclusives will allow you to be the first on your block...

ALICE: The Personal Pascal This is truly the easiest to learn implementation of the Pascal language for any machine. The program takes care of all the begins, ends and semi-colons so all you do is fill in the blanks ... no syntax errors! Applicable extensions are included from *'Turbo Pascal'* and many existing 'Turbo' programs will run without modification. The ease of use by programming in templates makes this much more than a language; it's an educational tool as well. Looking Glass Software Limited ($109.95)

CERTIFICATE MAKER Highly successful on other machines, this program contains several hundred 'canned' certificate designs and borders. Custom graphic and text applications may be created within the program allowing as much freedom as many others in this category.

CERTIFICATE MAKER LIBRARY VOL. I is also available and contains several hundred more certificates which can be cross-referenced amd modified within the original program. Both come as two-disk sets and are available from Springboard Software, ($44.95) and ($34.95) respectively.

CHAMPIONSHIP BASEBALL A sports simulation where you must build your team from the ground up. Choosing players from a pool of existing greats, you control all aspects of play. Hitting, base running, pitching, catching, playing the outfield are some of your commands. A two-player mode is included. Activision (Gamestar) ($39.95)

CHESSMASTER 2000 This chess program contains a digitized voice module from ALPHA SYSTEMS that is by far the best offering to date in any ST program. Although the relative playing strength is somewhat less than other ST chess programs, the ease of play makes it very enjoyable for players rated 1600 or below by U.S. Chess Federation standards. Electronic Arts (The Software Toolworks) ($44.95)

CRYSTAL CASTLE Commercial arcade action once again comes to the ST. The object, as usual, is that you must survive from screen to screen. This game uses the joystick only in a somewhat difficult to manipulate diagonal fashion. Atari (Andromeda) ($29.95)

FLASH v1.12 A 'few' very functional enhancements have been added to ST's most popular program. Comments may be added to .DO files for easier readability by others. A 'TYPE' messages command allows writing to the terminal screen without sending or appending the capture buffer, faster scrolling within the capture buffer, and a new keyboard command allows clearing the capture buffer from the terminal screen, Alt-W only. Baud rates for specific telephone numbers may be preset from within the dial directory. There is also the addition of drive directories for disks A thru I. Antic Software (The Catalog) ($39.95)

HIGH ROLLER Another flight simulator which utilizes the Harrier-style aircraft. This is a full color 'only' implementation which comes in a two-disk set. Mindscape (Mirrorsoft) ($49.95)

LABEL MASTER ELITE A very impressive new version of *LABEL MASTER* which has several new features including cut & paste, disk label maker (in a fashion after *Action Pak*) and enhanced drawing features not normally found in this level of program. This is not an upgrade, but a complete new version. Migraph ($39.95) Pervious version owners may be upgraded for $5.00 plus the old disk.

LOGISTIX This is a time and project management tool that integrates both time and financial functions into a single worksheet. There is a powerfull spreadsheet and database that incorporates presentation quality graphics for personnel schedules, shipments management, work flow rates and production. Sideways printing is built in and supports over 20 different international currency symbols. Grafox (CSS) ($149.95)

MICROLEAGUE BASEBALL The realistic baseball simulation which allows trading of players among teams, selective team matchups and individual player modification. The 'STATS' disk contains real statistical values for hundreds of players and allows the creations of one's own data disk. This is for the real baseball fanatic and is not truly intended for the arcade type action player. Microleague Sports ($49.95)

NINJA This arcade action beat-em-up finally makes it off the vaporware list. Although months late, this program has the finest user interface for these kinds of games. Your goal is to literally fight your way to 'upper' levels to obtain the sacred idol and position. Mastertronics ($29.95)

ROADWAR 2000 A futuristic blood and gore psuedo-simulation where the main party of characters

attempt to survive by whatever means possible. A slight deviation from the usual fare but still very enjoyable if you get properly started. S.S.I. ($44.95)

ST TERMINAL 3.0 This new version of a popular terminal program offers enhanced features over the older version plus the addition of many new ones. Included are the addition of new transfer protocols like Compuserve 'B', Ymodem batch and a special 'S' protocol for use with the local bulletin board systems. Sequence dialing and a 'Status' line has been added to the terminal screen interface. Commnet Systems ($29.95)

SUPERBASE An advanced B+ tree file structure is the heart of this powerful database program. Some features include built-in report generator, the ability to make relational queries across multiple files, import properly delimited files from other bases and export ASCII format if desired. Progressive Peripherals & Software (CSS) ($149.95)

THE FINAL CUT A 16-Track polyphonic sequencer/editor/composer. This is a full-featured mutli-track MIDI sequencer which includes real-time recording, step-time recording, cue point and autocue features, variable tempo, adjustable metronome, MIDI sync as master or slave, copy, merge, append, insert, erase, delete and repeat phrases or tracks. Legend Software ($124.95)

ULTIMA III The long awaited sequal to the very popular *ULTIMA II* is very impressive on the ST. The graphics have been somewhat enhanced and the player may use the mouse for certain functions instead of or with the keyboard. Game play is identical to the 8-bit version. Electronic Arts (Origin Systems) ($59.95)

[Author's Note: The titles appearing in these articles are randomly selected from 30-50 new offerings I receive information about each month. All products named are the trademarks of their respective manufacturers. Their mention here is intended for informational purposes only and does not constitute either a recommendation or endorsement.]

CLASSIFIED ADS

[Classified Ads are free to Current Notes subscribers and WAACE club members ($5 to anyone else). Send your ad to CN Classified, 122 N. Johnson Rd., Sterling, VA 22170.]

FOR SALE: Atari 850 inteface module used 6 hours also Atark Bookkeeper program with literature. Performs all business related reports and accounts. Prints ledgers, customer lists and balance sheets. Excellent for any small business. Reasonable offers. Charlie (301) 267-9245.

REGENT BASE version 1.1 with tutorial. Hardly used -- I am a dBASE III (dBMAN) user and am too old to learn a new system. Paid $65.00, will sell for $37.00 (includes $2.00 for shipping). Send check or money order to Myron S. Ottley, 9613 Riggs Road, Adelphi, MD 20783, or call (301) 439-4812.

2600 ELITE SYSTEM. Due to extreme illness, I need to sell my collection of Atari 2600 cartridges and tapes. Over 220 of ONLY THE FINEST programs. No Junk. Includes all arcadia tapes of which four were never released. Also 3 carts never released by Mythicon, and eight carts by Atari including one called Quadsun with voice. Other impossible to find titles such as *Cragy Climber* and *Gravitar*. All include original documentation. I was a serious collector. I need help selling them due to medical expenses. Please help. $1,000 or best offer. Call Charles Masek, (313) 268-4085.

FOR SALE: Computereyes (8-bit), B&W Pansonic camera, cables, 16 level capture software, $130.00. Write to Robert Reitz, at 218 N. 4th St., Sunbury, PA 17801.

FOR SALE: ATARI 130XE $90, Atari 800XL $75, Atari 1050 Disk Drive (ICD Doubler) $85, Atari 850 Interface $60, Atari 825 Printer $75, Model 1702 Color Monitor $125, Atari Touch Tablet $25, AtariWriter $15, Atari 1030 Modem $35, Atari 520ST (1 Mb Ram), 2 SF324 Disk Drives, SC1224 Monitor $750. All items in original boxes and in new condition. Call 1-205-793-3398 for info and price on other items.

FOR SALE: ATARI XMM 801 Printer, $110. Atari Software: AtariWriter, $20; Mastertype, $10. Pole Position, Joust, Ms. Pacman, Jungle Hunt, Donkey Kong Jr., Miner 2049er, and Jumpman Jr., $7 each. Zaxxon, Donkey Kong, Pacman, Keystone Capers, $5 each. Qiz, $3; Chess Master 2000, $22; F15 Stike Eagle, $15; Music Construction Set, $10; and Party Ware, $7. All manuals included. Call Tuan, (703) 532-8089 between 6-11 pm.

ATARI IN THE WILDERNESS
Starting Cold

by Florence B. Cushman

Can you imagine the excitement and trepidation, if you're living in the wilderness, near the Canadian border, and you learn you are the recipient of a new Atari 1040 ST computer? Never having owned a computer before makes the feeling indescribable. I had only played a round of golf on an Atari about three months previously. So, in preparation, I searched for and purchased a large, absolutely flattop desk with shelves for storing papers, etc., and a good floor lamp. Little did I know that assembling the desk was to be the most difficult thing I would have to do!

My computer arrived the day before I finished this task or it might never have arrived at all, for I was almost ready to cancel the whole idea. But with the assembly finally out of the way, I proceeded to unwrap my possessions. This was done with the utmost of care, for I had been duly "warned" by the packer. I also saved the cartons and packing material as instructed, in the event of future moves or unforeseen disasters. Connecting the wiring was extremely simple -- each cord can only fit into its correct place on the 1040ST -- it is very compact, no separate drive, etc. To start, I only connected the computer to the screen. I did realize however that it would be smart to purchase a 6-outlet surge protector immediately to prepare for the printer connection and whatever other accessories I might wish to purchase.

Having connected the two together, I took a deep breath and turned on the machines. The screen came alive, wrapped in a green shining light. Immediately I snapped it off. I was terrified it was a warning sign that I had misconnected it. After searching madly through the manuals and finding nothing about "red or green lights" I reasoned it was probably safe to continue and did so. Everything stayed cool, including myself. I was in business. Now my mentor had advised me to start with the *1st WORD* disc. So after inserting that and connecting the mouse, I increased my intimacy with the machine.

The Atari 1040 comes with several manuals. I started with the owners manual and then turned to the *1ST WORD* users manual. I learned to make copies of the *1ST WORD* and Language discs and did so immediately in the event I should accidently destroy the original discs. From then on I used the copies in my learning procedure. I soon found the manuals confusing -- remember I had no familiarity with any part of a computer. Thank God, the President, and the Managing Editor of CURRENT NOTES! The latter came to the rescue with a videotape *How to Use the Atari 520 ST*. While that was not my machine, the principles are the same. The tape covers the basic operations, *1st WORD*, *NEOCHROME* and word processing with a short piece at the end on how to install a printer.

It was exactly what I needed. I took it very slowly, learning how to open, close and delete files, transfer a file and then several. This was probably too big a bite at first, so I practiced it all and then reread the manual. My next adventure was the *Neochrome* program -- not only a lot of fun but it gave me a feeling of accomplishment. Painting and drawing brings relief from the strict mind-bending attention to detail. While I was doing this, I was taking a TV computer course sponsored by the University, which taught me absolutely nothing. It was largely an advertisement, and after three weeks, I dropped this. The videotape was far more valuable.

My mentor had also bought me a few games. You will never know the relief these provided. There really is quite a bit to learn and all at once, so the use of games can be a godsend. And it also makes you much more comfortable with your new friend. I found *Leader Board*, a golf game; *10th Frame*, bowling; *Buzz Word*, a word game; and *Shanghai*, a tile-matching game, good starters. Occasionally, I wonder if there is anything else I want to use this device for.

But on to word processing -- my real purpose? The first thing to do in word processing -- and it didn't seem so important at first, but it is, was to set my screen resolution. I like "MEDIUM" -- it seems to be about the right size for the length of my essays, whatever, but I think you have to find out for yourself. "LOW" simply did not hold enough for me. Being able to click on the "Help" file saved me a lot of worry when I was rushing. The video tape is excellent in explaining the use of doc.extensions, deleting text with key or backspace cursor, F6 key deleting lines, right justifying and word wrapping, and block commands. All of this is in the manual, but seeing it in action helps a good deal.

Once familiar with word processing, I was ready to connect my printer. Here again the tape was my salvation, showing me just how to set up my printer file. In fact, it worked right away. Be prepared, however, for the sound. When mine started, my dog blasted off in a fit of howling. Fortunately, he only did that the first time, so I still have him.

This all probably sounds rather elementary. But befriending a computer seemed, indeed, a momentous undertaking at the time. But, it can be made easier with a few learning tools and an understanding mentor. And believe me, as you new owners well know, it is hard to imagine life without my friend. But I have to rush off now. We are playing 18 holes on course 4. There aren't many desk jobs which offer this much exercise!

ATARI'S NEIL HARRIS
At the Denver Atari Expo

by Gregg Anderson

Atari's Director of Marketing Communications, Neil Harris, was one of several representing the home office at the Denver show. I'll try to be as accurate as possible in re- peating what was said, asked and answered but keep in mind that the human memory is very fallible (especially if its' mine) and my tape recorder had weak batteries.

After a few jokes about the slope of the podium and the absence of a PA system, Neil started off by saying how pleased he was to be at the fifth Atari Expo since the creation of the New Atari. Glancing around he noticed that he was the only person in the room with a tie on and quickly decided to join the rest of us by taking it off to a round of applause.

Neil doesn't like to give formal talks, and came to the podium without notes, papers or anything but his imagination. Basically he just wanted to fill us in on the state of Atari and let us know what the company has been up to. From here on I'll be quoting him from his speech.

"Already the ST series computer is the number one selling personal computer in Germany, Switzerland and several other European countries. I think we just made the number one on the list in England. Something that may surprise you is that the XE computer is the number one selling home computer in those same countries at this time. So we've really made great progress over there. In Europe, as opposed to the United States, Atari had virtually no presence at all until about two years ago. The old Atari had tried to run the entire world sales out of the United States. Which, in our opinion, wasn't really the best way to go. Each country has their own traditions and their own way of doing business, so the only way to do it is to have offices those countries.

"Jack Tramiel (who had been spending one week out of the month in the U.S. for the last two years) has camped in our offices and has been calling people in one by one and we can really see the army getting into shape for the battle. We've gotten our product line into shape. Where we had a few good products now we've tweaked them into shape and gotten a few more products to where we really have a well rounded line to go after the U.S. market. We're talking to all the big accounts and the smaller accounts to try and get the distribution set up, we know that distribution has been our number one problem in this country so far."

"The product line at this point... I don't know how many of you still play with those home video games, I know I do from time to time but that's really not my primary interest these days but we have a lot going there. We have the 2600 game machine, with 25 million units in people's houses and in some cases people's closets. It's been revitalized quite a bit and has new software coming out for it. The 7800 super game system was actually launched last year and sold out almost immediately. We're going great guns getting arcade and computer games titled moved over onto that machine. We've just launched a new game machine which..... Tell me, how many people here have 8-bit Atari computers? Everybody, my God! Ah.... One of the biggest problems we've had in the XE line is that the retailers are scared. They were carrying them up to a certain time a few years ago when the bottom dropped out and a lot of those people were 'burned' by having a lot of inventory of software and such. It's been very difficult to get them to carry it since then. We've tried our best, we've released new software titles and we've been out there pushing it and honestly it hasn't really been working that well. Though we have no intention of letting it go by the wayside. We have a great product and if Commodore 64s are selling there's no reason the XEs shouldn't be out there doing at least as well."

"The greatest complaint we've gotten from 8-bit owners is that there isn't that much new software being developed for it. At least not as much as for other machines. In the last two months I've gone out with some of our sales guys and visited companies like Sears, K-mart and Montgomery Wards. You know, small accounts. They actually received us very well, they were much more receptive to carrying the 65XE as a game system then carrying the 65XE itself. Even though they are basically the same machine. So we'll try and sneak in that way and see if it works."

"I was in Jack Tramiel's office about two days ago, I didn't quiver once which is one of the few times I've been in there and not been terrified. One of the primary concerns that he had was dealing with the concerns of user group members regarding XE software availability. We're starting to formulate some ideas on what to do about that. The XE game machine is one big piece of that, but there are other approaches over the next few months that you folks should be hearing about."

"Moving on up the next step in the mid-range home computer system is the new Atari PC. Unfortunately, we weren't able to bring it here or to the Allentown show in two weeks because we are competing against the world's largest computer show which is the CBIT (or Hannover Fair) which is held in Hannover West Germany next week. They took every prototype we had including the PC, the XE game machine and the Mega series and shipped them to Hannover. We tried to get them but it's hard to compete against shows like that. I apologize we'll see if we can do something about that, maybe

coming around visiting some of the user groups in the area and bring the machine along so you can get a look at it."

"Anyway, the PC is really meant to be one of those machines where you go in to your K-Mart type store, you know you want a PC compatible, you see that it offers all the things you want at the right price, so you just take it home, plug it in and away you go. It comes with MS-DOS, GEM, a word processor, a drawing program and a mouse. Basically everything you need. Its meant for that 90% of the market that needs the basic system configuration. Maybe they're using a computer at work and they want to run the same software at home. That's really what it's all about. We'll probably see those on the shelves in the later part of the summer line."

"Contrary to rumors there will be NO change to the current ST line." [My note: this does conflict with rumors heard before, during and after the show.] "The 520 and 1040 will continue in their current forms, they will not be phased out as other computers come on-line. We expect the 520 to continue to sell real well at the new special price we have on the monochrome 520 system. The 1040 is still doing extremely well for us and we expect the Megas to give us more presence in the office marketplace as we get the desktop publishing systems on line. So we've really taken a shot at having a solid line running from low end video games to a very powerful micro computer system."

"It's interesting that people in the computer industry seem to have a very good idea of what the ST is and it's capabilities but still don't take it seriously as a business machine simply because we've not gotten the penetration into the offices we needed. We've put together a division to go after that office computing market and I think the combination of the Mega ST and the laser printer should help up out there a lot. This is mainly to get credibility, personally I don't care about the office market... You know, that's the boring part of the computer industry, computers that only do drudgery. I want to play 'Kill a Happy Face' as well as word processing. But you have to have some presence in that market to be taken seriously. If we want to see the machines in the Computerlands and Businesslands and see the machine given the kind of support we want to see then we have to be more credible in that end of the marketplace. This is what we're trying to do. "

"The future includes a number of new products that are in the laboratories including things like the PC compatible box for the ST (which is still on it's way). It got a little bit sidetracked, basically we took the research we had done with that and decided we could make a full computer out of it and get a good piece of the market with it. The box that goes on the the ST is still on it's way and then we've got a couple of high end systems in work. A machine that would be the next step up from the ST in terms of graphics resolution (as a separate computer) and then a back-end system that would go into an ST or into an Enhanced Graphics ST (EST) that would be a full 32-bit processor, kind of a VAX power but in a little box that sits on the desk. People like engineers who want a work station product can do the number crunching on this box and have better graphics at the same time. The better graphics machine will be fully compatible with the ST, but upwardly compatible so that it will do more as well."

"At any rate, we do our very best to put that product together keeping the cost down. We have a lot of expertise at low cost manufacturing and have very good people in the orient looking for the best prices on chips and what-ever else. And when we get the cost down to the lowest possible point we figure out what that would translate to in retail. That's how we price our products. This is very different from companies such as IBM and Apple who come up with a product and ask 'what can we get for it'. If they can make 10 times what it costs then that's great for them, they make huge profits on the machine. We don't operate that way. Every time the chip prices go down we'll take that and knock it out at the retail level. We feel that we can sell more computers that way, a lot more computers. By selling more computers we'll make the same profit that the other guys will make. We'll make it up in volume. There are a lot of different companies with a lot of computers and people that are evangelical about it. But we don't have anyone who's title is evangelist like Apple does. Something else separates us from other companies. Throughout the company we have people who would, in other companies, just be business types without computer experience or skills, at Atari they really into computers. With myself I'm in the marketing department, my job covers things like advertising, PR and support and a few other areas. But I'm an old computer guy from way back. My first job out of college was as a computer programmer and I have a few programming articles in Compute!s First Book of Atari. I'd go home and fool around with my computer because I liked it. Our lawyer had an Atari 800, he bought it to play *Star Raiders* like a lot of people did. And basically that's the way we work, there is a much higher percentage of computer people working with us."

"At this point I'd like to throw the floor open for questions, I'm sure there are on or two of them out there <grin>..."

From here on I'll be paraphrasing the questions and replies.

Does the new PC have the Intel 8086 or 8088 CPU?

That was my fault, there was a typo in the press release we sent from Atari Explorer that listed the CPU as the 8086. The unit will use the 8088 and have a socket for an 8087 math co-processor. Since then we've tried to correct that and have posted it to our bulletin board and elsewhere.

(Continued on Page 46)

PUBLIC INTEREST COMPUTER ASSOCIATION
Dedicated to Helping Non-Profits

by Baird Straughn

[PICA, in the person of Baird Straughn, got in touch with me to borrow an Atari 800 for an open house featuring "scoially concious" gaming. Chris Crawford had sent them a copy of SCRAM and I helped Baird check it out. I felt that Public Interest Computing might be of interest to many of our readers, so I extracted a promise that Baird would tell us about PICA for Current Notes. Baird's comments follow: --John Barnes]

Nonprofit organizations across the nation -- and especially in the Washington, D.C. area -- have entered the computer age in a big way. It is estimated that there are 4,000 nonprofits in Washington, and nearly half are using computers. Word-processing, databases, and communications have become mainstays of nonprofit work, and desktop publishing and other presentational applications rank high in importance for the many national headquarters located here. Most D.C. agencies exist mainly to gather and disseminate information, and a great number of them keep that information on machines. From Public Citizen through the Isaac Walton League, problems with computers can mean that an organization gets nothing done.

Once a nonprofit puts its valuable information on computers in order to manipulate it, that nonprofit has also become dependent upon its machines and the people who know how to run them. That's where the Public Interest Computer Association (PICA) fits in. A nonprofit itself, PICA is dedicated to helping other nonprofits with their computer-related problems, providing them with instruction, and generally helping to make them independently able to meet their own needs.

PICA presently serves a membership of about two hundred organizations, which range from national headquarters of lobbying groups like People for the American Way to local charity organizations like Hannah House. At the PICA facilities, located at 2001 O St. NW near the Dupont Circle Metro stop, members take courses in several of the standard nonprofit software packages. Individuals drop by to use PICA's library of magazines and evaluations, to try out software from the library of more than 100 packages, to use the desktop publishing center, or to talk with one of the three full-time staff about their needs and how they can best meet them.

PICA also tries to keep its members abreast of current developments. On the third Thursday of each month, PICA hosts an Open House for the general public -- March's gathering focussed on "Interactive Games in the Public Interest," and Atari user group member John Barnes assisted with the loan of an Atari 800. On April 23, the topic was "Computerized Accounting for Nonprofits," and coming on May 21st, it will be "Remote Bulletin Board Systems with a Public-Interest Perspective". All are invited.

PICA offers several things that nonprofits don't find elsewhere in the metropolitan area's bewildering array of vendors and user groups. First, the staff have accrued several years of experience with the computer market and can help nonprofits plan for the future -- or at least, for the next two years, which is about the longest expected validity of any piece of advice in the computer field! Second, PICA has no vested interest in selling any piece of software or hardware, or in directing its members to any vendor. Its real concern is that it's members buy what they can use effectively -- which helps cut down the time spent helping them out on the phone! PICA does monitor its members and their experience with Washington area vendors, and is able to direct new members to vendors who have best satisfied their customers in the past.

Finally, PICA has a reputation for giving sensible advice -- like, don't hook up your LAN [*Local Area Network*] before you've tried Sneakernet. There's no secret involved here. What seems like a slick idea to a dyed-in-the-wool techie and like a good sell to a salesman will probably look like a nightmare to the people who have to use it. PICA staff spend 40++ hours every week being bombarded with the most exotic of technical requests (two hundred nonprofits can come up with some pretty crazy problems!) is enough to teach anyone the value of standardization and reliability. PICA has learned that employees are usually better off with simple programs which they can understand and manipulate themselves, rather than expensive, custom-programmed packages which force them to rely on others.

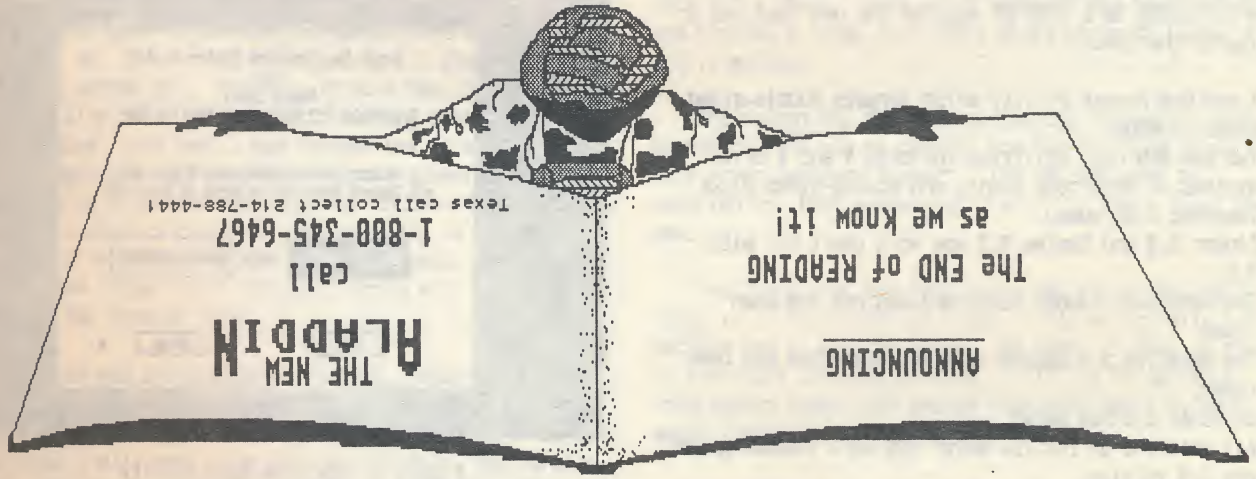
The Public Interest Computer Association can offer benefits to another group, too. At present, about 40 computer professionals work as consultants, trainers, or volunteers to assist member organizations. All agree that it's a reward in itself to work with PICA's members and their employees, who are highly motivated individuals often involved in projects of national significance. If you're interested, get in touch with Baird Straughan, the current program director.

PICA was formed in 1984 by Marc Rotenburg, an intern of the American Civil Liberties Union who found that most of his time was going into technical assistance for staff and even for other associated organizations. With grants from local and national donors, Rotenburg opened the Public Interest Computer Organization in a basement in the financial district.

PICA's first official action was sponsorship of a national conference for other nascent nonprofit computer

computer labs, which eventually got started in Dallas, Los Angeles, Portland, Oregon, and Chicago. Many a social activist of the 1970's had, it seems, turned to information technology as a way of helping to empower public-interest groups (and earn a living at the same time.) The five groups founded the Technology Resource Consortium, which has received equipment funding from the Benton Foundation and Apple Computer, which has a forward-thinking policy of grants to nonprofits -- not a bad idea, since they represent a market limited in resources but heavy in numbers.

What the future holds is hard to say. The needs of the membership change nearly (but not quite) as fast as technology. Desktop publishing for PC's, remote bulletin board systems, and interactive training are the areas which our staff is currently exploring. But whichever way technology turns, PICA will be ready to help organizations assess their needs, choose reasonable paths of computerization, and separate vaporware from reality.



ADVENTURES IN THE MAGIC SACDOM
Magic 4.0 ... and Beyond

by Jeff Greenblatt

MAGIC 4.0

It was approximately 3:30 pm on March 9, 1987 when my wife called me at the office to ask whether I ordered something from Data Pacific. Since my answer was no, I asked her to open the package. She opened it and said that it contained a disk and a letter from Dave Small. The disk is labelled 4.0 beta. Three hours later, I arrived home and immediately snatched up the disk and accompanying one page letter. The letter briefly described that the disk contains a beta version of 4.0, suggested that I read the REV4.DOC file, and asks me to test it out and report any bugs to Dave Small.

After gobbling down my diner, I made a bee line for the ST, inserted the disk in the drive, booted up, and clicked on the drive A icon to view the files on the disk. Most of the files didn't look familiar. Finding a file entitled MAGIC4H.PRG, I clicked on it and the drive began to run. A few seconds later a sign-on page appeared on the screen and I stared at it for a few minutes ..... It was totally new! At this point in time I decided that I better read the REV4.DOC file, as suggested in the letter, before I went on any further. I rebooted and printed out the file which ended up being ten pages long.

The doc file described all the new features and files on the disk, and also described some of the features to be implemented in the future. The file also contains portions of the documentation found with versions 3.5, 3.0 and 2.0 for some odd reason. Briefly, the following is a list of some of the new features or files on the disk:

* A new GEM Format Utility which formats double-sided disks to 800k.
* Two New GEM Copy Utilities for both 1 and 2 drive systems -- both copy single and double-sided disks.
* Improved disk speed.
* Finder 5.3 and System 3.2 now work (sort of) with 4.0.
* The return to Finder (desktop) bug has now been fixed.
* The MacWrite 2.2 search function crash has now been fixed.
* Switcher 5.0 now works.
* All versions of Font/DA Mover now work including the new 3.4 version.
* The notepad, clipboard and scrapbook all work.

Also mentioned is the fact that the bug that crashed Notepad and Font/DA Mover could have crashed other applications like Superpaint which now works fine. If an application crashed with a "PC=FFFFxxxx" (xxxx being any number), it probably will work with 4.0. Another noteworthy item is that Motivator is no longer supported. Motivator worked well until you ejected your startup disk, inserted a new disk and ejected it only to find that the new disk has been overwritten by the contents of what was in the Motivator.

Now that I had read the doc file, it was time to get at it. The fist thing I decided to do was to format a disk double-sided. I found a file entitled MCFORMAT.PRG and clicked on it. The drive ran and a few seconds later I got an error message that it is "Unable to locate Formatter.RSC file"....back to the desktop. Browsing through the files on the disk I found a file entitled MCFORMAT.RSC, so I clicked on the format program again and the same error message appeared. I tried changing the name to FORMAT.RSC and FORMATTER.RSC and got the same message. It was 8 pm by then and it was too late to call Dave Small to find out what was wrong.

I decided to continue on, figuring that since I would call Dave in the morning, I may find something else to discuss with him. The next thing I tried was the new copy utility. I clicked on MCCOPY2 (2 drive system) and a new window appeared, see Figure 1. This copy utility worked fine and is much improved over the old version. You will be able to make as many copies as you want before exiting back to the desktop.

Figure 1. New Disk Copy Utility

Now back to that 4.0 sign-on page. As you can see in Figure 2, there are several new features that have been added to it. However, the new features (light gray) have not been implemented yet; more about this

later. Note that the Motivator is gone as mentioned earlier and the old 896k system is now 828k.

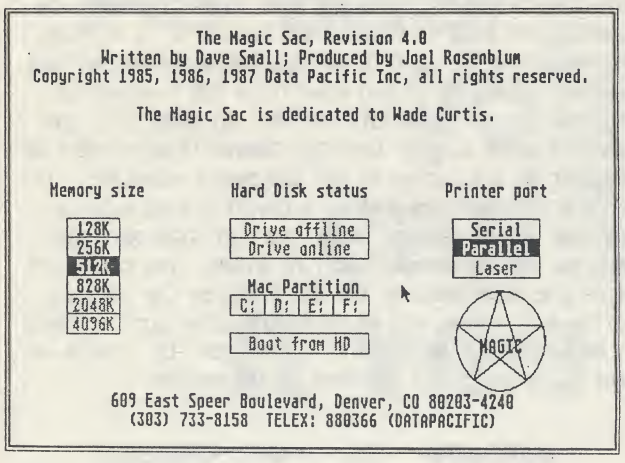


Figure 2. Magic 4.0 Sign-On Page

Now that I had set the system to 512k with a parallel port, I clicked on the MAGIC button and got a new page identifying it as a beta version of 4.0, which instructed me to insert my startup disk. It's now 11 pm, three hours later, and I had tried everything I can think of that crashed on me before including those mentioned as being fixed in the doc file. This revision is a vast improvement over the previous versions. Some applications still crash when booted up, like Fullpaint, but other applications now work fine (see list at the end of this article). My guess is that any application that has illegal instructions will never work. Dave points out in the doc file that *MacWrite 4.5* will never work due to illegal instructions and that Apple can't get it to work with their Mac II either. Now if I could only get that format utility to work.

I called Dave in the morning and he wasn't in. He returned my call in the early afternoon and told me that the file was incorrectly named and that I should rename the file MCFORM.RSC. Oh well, it is a beta copy. Incidentally, Dave is great at returning phone calls, he always does. Now that I had renamed the file, I clicked on MCFORMAT.PRG again and a new window appeared giving me a choice of drives and single or double-sided format, as illustrated in Figure 3. This utility is just what the doctor ordered, 800k of free disk space. Now when the system folder is on the disk, there will be plenty of room for lots of files.

By now you are undoubtedly asking, "When will it be available?" Well, there are still a few bugs in it that need to be fixed before its released. My guess is early May and it will most likely be version 4.2. Why version 4.2, you ask, because I'm supposed to get version 4.1 for beta testing by mid-April. Data Pacific will most likely make it available for a nominal upgrade fee of $5 or $10 in exchange for your old 2.0 or 3.0 disk.

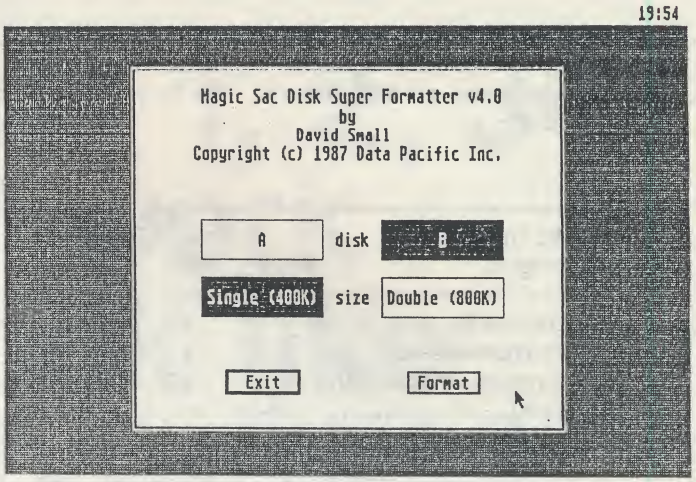


Figure 3. New Disk Format Utility

..... AND BEYOND

Back to the sign-on page. Those new features not yet implemented will be in version 5.0. To support the added memory of the MEGA ST and ST's upgraded to 2.5 and 4 megs, 2048k and 4096k systems will be supported. Can you imagine, running switcher and ramdisks simultaneously with these size systems.

Hard drives will also be supported in version 5.0 which will allow you to boot up the Sac from the hard drive. The choice of memory partitioning will most likely be 400k, 800k, 1.6 meg or 3.2 meg Magic disk sizes.

How about auto error recovery? Instead of getting the crash page and rebooting the system, auto error recovery will continue the application from where it crashed. You'll never know the application did something illegal. The most common error (crash) is the Zero Store crash. Auto error recovery has been tested and handled a "disk full" Zero Store error in Finder 1.0 and it worked.

The reason why the 896k system was reduced in size by 64k to 828k was to reserve the 64k for hard drive and auto error recovery support. The 64k may also be reserved for that mysterious "Laser" in the printer port box.

The translator box that will read and write Mac disks is in the prototype stage. This device will fit between the ST and the drive. My guess is that it will be available late May or June. I'll try to get more information about this device from Dave Small by next month including its tentative price.

SOFTWARE THAT WORKS - UPDATE

Many thanks to Bob Childress of Dallas, Texas; Dave Glotfelty of Seabrook, Maryland; Bill Price of Vienna,

Virginia; Norm Walker of Fort Worth, Texas; and Sam Wang of Clemson, South Carolina for calling in and reporting what software works and what doesn't. The following is a list of both:

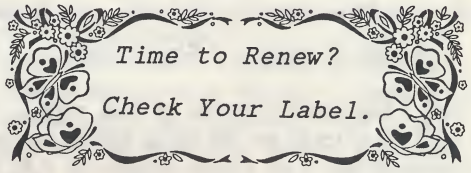
Application Program	Works	Doesn't Work
Comicworks		X
CalenderMaker		X
Dungeons of Doom 4.0		X
Excel	X	
FileMaker Plus	X	
Fullpaint		X
GraphicWorks		X
MAC6800 Dev. System	X	
MAC3D	X	
MacBillboard	X	
MacDraft		X
MacDraw	X	
MacInTax	X	
MacPaint	X	
MacPlaymate		X
MacProject	X	
MacWrite 2.2	X	
MacWrite 4.5		X
More		X
Microsoft Basic	X	
Microsoft Word 3.0		X
Microsoft Works	X	*
Phoenix 3D	X	
Ready, Set, Go 3.0	X	
Reflex	X	
Spellwell	X	
StatView 512+	X	
Superpaint	X	
TK Solver	X	

* The Telecommunications portion of Microsoft Works crashes after making the terminal settings; Spreadsheet, Database and Word Processing portions of the program appear to work fine.

All the above were tested using Finder 4.1 and Magic 3.5 or 4.0. The above applications are all unprotected; protected software will not be tested until the translator box is released by Data Pacific. If you're uncertain as to whether your software is protected, I have a list of several hundred commercial products which tells whether they are protected or not, so give me a call. I will continue to update the above list every month as long as readers continue to report new information. So give me a call at 703-450-6462 (between 7:00pm - 10:00pm EDT weekdays, or any reasonable time on the weekends) or drop me a card at 804 N. Argonne Ave., Sterling, VA 22170.

TIPS

When printing text in the High Quality mode, the Mac uses a font that is twice the size to be printed. The double-sized font is reduced 50% before it is printed. The reason for doing this is that the double-sized font has more pixels in it and when it is 50% reduced, it produces a higher resolution font. In order to print Geneva 9 point at High Quality, Geneva 18 point must be resident in the system to get the best resolution. If you are unsure as to whether a specific font size is resident in the system, check the font size pull down menu for hollow or outlined font sizes. The solid font sizes are calculated by the Mac based on the resident hollow font sizes, and as such, the print quality tends to be poor. For best overall print quality, always use font sizes which are resident in the system.



MIDI STUDIO
Dr. T's CZ Patch Editor

Review by Grant Slawson

Hello again! Here we go with another fine entry into midi software from Dr. T. The *CZ Patch Editor* is a multi-faceted program that enables any Casio CZ owner to create, edit, and store patches for the CZ. It works with all CZ mod- els from the 101 to the 5000, and it greatly simplifies the editing process. This was as much a learning exper- lence for me with the Casio synthesizer as it was with the patch editor. I own Yamaha, Roland and Oberheim synths, but not a CZ, so I called a fellow musician/key- board player Gary Geller, and we got togeth- er with his CZ-3000. We routed it through the patch bay, and down- loaded all his internal patches into the ST, and then the fun began.

The instruction manual gives a very quick tutoring session which is foolproof in its nature. It's impossible to send any of your patches to another plane of existence if you follow this simple lesson step by step, and it gives the novice user a real sense of accomplishment to transfer patches from CZ to ST and back. The program boasts two main screens which are accessible from the mouse or "keyboard only" environments, and the choice is strictly yours. The first screen called up is the Librarian. This is where you load patches from the CZ to the ST, or from disk to ST, or swap patches from one of the 16 patch slots in any of the 4 patch banks to another slot. The user can store more than 80 banks of patches on a single-sided disk, which translates to about 1300 individual patches! Once you've selected a patch to be the guinea pig (I suggest starting with a "preset patch" as these patches can't be permanently removed from the CZ's memory), you enter the edit screen, and low and behold you see before you, a complete outline in both chart and graphic form of the patch to be mutilated, uh, I mean manipulated.

The basis of editing any synthesizer lies in the envelope or shape of the sound you are trying to create. The envelope has four basic points to it: Attack, decay, sustain and release. A brass sound will generally have a sharp attack, then a very quick decay and it settles at a sustain level slightly below the level of the initial attack. The release comes in when you let up on the key, although you can program the sound to sustain for a certain time and then automatically stop, just like the player ran out of air. The sound generators are known as Oscillators, and they are effected by the waveform used, i.e. sine-wave, sawtooth, square-wave, etc, and these waveforms are altered by changing their envelopes. Now if all this seems confusing, it is! This is a very incomplete description of how a synthesizer produces tone, but for those of you who are unfamiliar with this world, I think you will be able to better appreciate this review with a little understanding of the beast.

Let me interject something here about the CZ. As I previously mentioned, I am a novice CZ user and programmer. It appears Casio has gone out of their way as has Yamaha, Roland, Korg and all the rest to make editing the patches on their synths a laborious, demanding, decade encompassing feat of man against machine. Being very familiar with the DX-7 and the Matrix-6, I was not at all surprised to find great difficulty in editing with the window supplied in the CZ. I did try some programming the "hard way" so I could have something to compare the patch editor to. The use of this editor cuts editing time to a tenth of the usual, freeing you up to actually enjoy playing the instrument. Wow, what a concept!

Editing becomes easy when you can see all the parameters of the envelopes laid out in front of you on a chart. Each parameter is given a numerical value, and editing can be achieved by changing either real-time values or rates of the various stages of the envelope. There are three seperate envelopes displayed in graphic outline simultaneously on the bottom third of the screen. These envelopes effect the pitch of the oscillator, the waveform, and the amplitude, and changes made to the parameters in the chart are instantly reflected in the graphic readout. Not only can patches be stored, but envelopes as well can be saved and combined with other envelopes from different sounds to achieve some very nice layered patches. By combining a fast attack brass envelope with a smooth string envelope, and assigning one to each oscillator, I was able to get a very nice "orchestra" type of sound, and it took all of 15 minutes. Trying to achieve that without the CZ patch editor would have taken a good 2 hours, and probably would not have achieved the same results. I don't know about you, but two hours with various forms of the same sound tends to fatigue my ears to the point that I finally say "Good enough", and I am horror stricken when I listen to the patch the next day.

The program is capable of receiving banks A and B only from the CZ, as there is evidently a complex problem involved in retrieving patches from banks C & D. If you want to alter sounds in the latter two banks, you must load them into banks A & B in the CZ, put them into the ST, and edit them. Remenber to first save the sounds in A & B or you will lose anything you overwrite. The first thing I did before I moved everything around was make a copy of all the original CZ patches and stored them on disk, then I proceeded to make lots of mistakes, always confident in the knowledge I had idiot-proofed my CZ.

One of the most enjoyable things I do in the studio is experiment with patches and effects settings on the

keyboards and drum machines. There are quite a few interesting editing features in the CZ *Patch Editor* that make creating sounds a simple and very enjoyable project.

1) The ability to copy envelopes and store them seperately enables you to have a library of envelopes to mix and match. With this capability, you can create patches that would be inconceivable under normal circumstances.

2) The "switch" feature allows the instant transferof all the parameters in DCO1 with those in DCO2. An operation like this could take an hour if you had to copy each parameter individually, but it takes a second with CZ *Patch Editor*. This function can give you some interesting sounds, like brass with a reverseattack.

3) Insert and delete functions are provided for editing the envelopes. This lets you add a section to a patch to give two or three attacks where you started with one, and vice-versa.

4) The copy function allows you to move the values fromone envelope to another, even if it is an envelope for a different waveform. This is something you can't do without an editor, and not only does it open up a myriadof sonic possibilities, but it automatically adjusts the envelope values to coincide with the waveform you are nowusing.

Besides editing parameters within the envelopes, you can change the octave of either one of the oscillators, detune them by fractions of a note (referred to as cents), or by full pitches to achieve patches with built in harmony. Modulation, vibrato and line select are also instantaneously switchable, and the speed with which you can dissect a patch is staggering. While you're editing you need to be able to hear what these changes sound like, and the good doctor has provided you with the ability to trigger middle C on your CZ by pressing the right mouse button. You can change the note accessed by the mouse if you desire, but middle C was chosen because it is a good represen- tation of the sound across the keyboard. I did notice on complex effects patches it was more effective to play the CZ's keyboard as it tended to give a better overview of the sound, but for most editing, you never have to leave the computer keyboard and mouse, a very nice feature.

I have to say I thoroughly enjoyed reviewing the Dr. T CZ *Patch Editor*. It is very user friendly and gives you prompts and warnings whenever you move from operation to operation. The people at Dr. T have made this about as fool proof as any midi software I have seen. Those of you who have a CZ and are inclined to want to produce your own personalized sounds, this program is a must in your midi software library. Let's face it, everyone's ear is different, and my favorite brass patch might make you ill, and your strings may be sickeningly sweet to me, and at a selling price of about $70.00, this program is certainly affordable. If you want to really find out how much your CZ is capable of doing, pick up Dr. T's CZ *Patch Editor*.

Dr. T also produces patch editors for the DX-7, Oberheim Matrix-6, Lexicon PCM-70 digital reverb, the Ensoniq ESQ-1 digital piano and the four-operator Yamaha synthesizers. By the way, version 1.31 of the KCS (CN April '87) is out and not only is it easier to use, but they have incorporated a number of features that make it one of the most interesting and versatile sequencers I have seen. The *Copylst* is also available now, and this takes the note on events from the sequences recorded with the KCS, and translates them to notes on a staff. This is one I can't wait to see. The people at Dr. T are very helpful and are interested in the consumers views of their products, so drop them a line sometime and let them know your needs in midi software. I'm sure they'll appreciate the feedback (no pun intended!).

AC-FORTRAN
Industrial Strength Programming

Review by John Barnes

The most recent entry in the sweepstakes for a Fortran compiler for the ST comes from Absoft, in Warren, MI. My previous review of *ProFortran*, from Prospero, in England, revealed my fondness for a language that I know from years of experience. Unfortunately, I was obliged to find a new compiler after *ProFortran* choked on some code that involved arrays of CHARACTER variables. Bob Menton, of NOVATARI, had already told me that *AC FORTRAN* was the new standard among the people he works with, so I trekked over to L & Y, plunked down my $129.95, and brought *AC-FORTRAN* home.

I must say that I am pleased with the product, it is several jumps ahead of *ProFortran*, not only because it compiles my code, but because it is much more polished. I am told that this is the same package that Macintosh users can buy under the Microsoft name. The manual states that the main program and overlays are the same for all of the 68000 based machines on which it runs. Each specific machine has its own front end and there are undoubtedly some differences in the run-time library. From this it appears that ST owners are getting a product that is already quite mature.

The package includes two single-sided disks, and a thick reference manual. The disks contain the compiler, a linker, a run-time debugger, a librarian, some INCLUDES for interfacing to GEM, and a number of examples. Source codes for the library items are supplied if you need to pick them apart. I think this is a lot for the money.

The compiler will generate 68000 assembler code, so that it is easy to optimize codes if you need to (provided that you have an assembler handy). With a little work you may be able to splice AC/*FORTRAN* modules into libraries for other languages. I find this a very professional touch. I do not have an assembler, so I cannot tell how well this works.

The reference material includes a long section on interfaces to the GEM environment, but Absoft was obviously not able to package a whole shelf of reference material in one small box. You will need much more information (and time) if you want to delve into GEM.

You will also need an external editor to write your programs. The compiler accepts straight ASCII text, and I use *1st WORD* as a program editor, although others might want to use something like EMACS for better speed. The compile, link, run cycle is very fast. Unfortunately I have not been able to build command procedures in an MS-DOS shell to automate this. The company states that the command structures are UNIX-like and a UNIX shell might be useful in the development stages. The compiler produces an executable image that links dynamically to the library modules it needs, so that you usually do not need the linker at all. I usually use the linker to produce a stand alone image, thus removing the necessity for dragging the libraries around, but the resulting code can be rather bulky.

The linker and the librarian function straightforwardly. You can build command procedures for the linker, which is especially useful when you use lots of sub programs and libraries. Such written procedures also help to document your work and to prevent mistakes. The librarian is easy to use and it gives good listings of library contents. You must, however be careful when ordering things in libraries because the linker does not do backwards referencing, like ones on mainframes do.

The real joy in using this product comes, however, when it is time to ferret out those pesky, inevitable bugs. In some ways the DEBUG utility supplied with AC/*FORTRAN* is better than the one for the VAX. DEBUG constructs a shell around your program that lets you set breakpoints, step through your code, and examine the values of symbols interactively. This largely eliminates the need for PRINT and PAUSE statements when debugging. The ability to display the source code while debugging is more than nifty.

The DEBUG utility helps to compensate for the cryptic run time error messages.

The Absoft product appears to implement the ANSI Fortran 77 standard very well, and there are extensions in the form of DO WHILE, CYCLE, and CASE constructs that go a long way toward making a truly structured language.

As the above comments show I recommend AC/*FORTRAN* to experienced Fortran users or to those who want to learn this important language. Given the speed and ease of use in this product and the enormous amount of material in *FORTRAN* that exists in the real world, I expect the ST to become a desktop computer for serious work in mathematical modelling, engineering design, statistical analysis, simulation and the like. This is truly "Power without the Price".

For those who want to pursue *FORTRAN* further I have put an application called LIST66 up on the WAACE BBS and on GENIe. Look for it. I have also put up a file called BENCHMARK.ARC that contains the bench marks I used to evaluate *ProFortran*. I hope to get package together with the bench marks in various languages to make it easy to compare our results with those of, say, Steve Eltelman.

VIP PROFESSIONAL - GEM VERSION
A Lotus 1-2-3 Work-Alike

Review by Robert J. Nielsen

In the Tower of Babble of computer software, there is one clear standard among spreadsheets: *Lotus 1-2-3*. This best-selling program has countless books, seminars, video tapes, and even a magazine to instruct and enlighten users. This, plus 1-2-3's reputation for versatility and adaptability -- limited, it often seems, only by the creativity of the people using it -- have made it the clear favorite of business spreadsheet users.

As most people are aware, an electronic spreadsheet program is a blank table in which users enter numbers and text to create such things as budgets, inventories, and mailing lists. The joy of working with such a program comes from the ease with which one can update the table, with the program recalculating such things as totals and percentages.

LOTUS 1-2-3

In addition to the spreadsheet function, *Lotus 1-2-3* includes data base program and graphics functions. The data base is used to sort information, performing such tasks as alphabetizing lists, finding clients who have made purchases in the last month, and trimming from your list all customers who have purchases that total under $20.00 for the last year and who live outside your state. While these are all useful functions of 1-2-3, you should be aware that although this is called a data base, it is not a data base in the same sense that more powerful programs such as *dBase III+* are.

The graphics portion of *Lotus 1-2-3* constructs pie, line, and bar graphs from information in the spreadsheet. This is useful in making presentations. People can be easily bored by a page of numbers, meaningful and accurate though the figures may be. Zing them, however, with a graph showing the profit line diving towards the bottom of the chart, and you have immediately caught everyone's attention.

In short, *Lotus 1-2-3* is the favorite of business users to construct tables of numbers, sort information, and create simple graphs based on the information in the table. It is such a popular program, that other software publishers have come out with programs that claim to work just as *Lotus 1-2-3* does. One of these clones, available for the ST, is *VIP PROFESSIONAL*.

Presently, the only way to have *Lotus 1-2-3* compatibility with an Atari ST computer is by purchasing a clone such as *VIP PROFESSIONAL*. Given that the makers of *Lotus 1-2-3* may never come out with a version for the ST (currently it exists only for the IBM PC and compatibles) it may be the only choice for the future.

VIP PROFESSIONAL

This said, it is time to take a closer look at *VIP PROFESSIONAL*. First, the potential buyer should be aware that there are several versions of the program packaged in very similar boxes: the text version, the GEM version, and the LITE version. The text version was the original 1-2-3 work-alike spreadsheet. This has now been replaced by the GEM version, which adds mouse functions to the program. The LITE version, according the publishers, is a less powerful program based on the same system, intended for home use. Last, but not least, the publishers will soon be coming out with a special power-user text version of *VIP PROFESSIONAL*. This program would look more like *Lotus 1-2-3* than the GEM version of VIP does. In any case, take a careful look at the package before buying to make sure that you are getting the version that you want.

The GEM version, when first loaded, is immediately discernible as different from 1-2-3: the explanation line has been moved to the bottom of the screen, where a control box (for GEM functions) has been added. Fewer rows displayed on the screen and a superimposed grid are other variations from *Lotus 1-2-3*'s look.

Differences in functioning are limited essentially to the mouse functions. For example, *VIP GEM* constantly displays a menu at the top of the screen, whose items can be selected by pointing and clicking. When the spreadsheet requires a range to be specified, the user can specify a box with the mouse. It should be pointed out that the GEM version allows the standard *Lotus 1-2-3* keystrokes in performing any of the above functions. For example, the user can always type "/re{return}" to erase the contents of a cell.

In terms of the functions of the spreadsheet, the program does everything that Lotus (version 1A) does. I created graphs, alphabetized lists, created macros, and entered text just the way I did in *Lotus 1-2-3*. One difference is that GEM's spreadsheet is more than 8,000 lines long (vs. 1-2-3 version 1A's 2048 lines). This is not a handicap, unless you need to transfer a GEM worksheet containing more than 2048 lines to Lotus version 1A. Another difference is that moving the cursor through a spreadsheet in GEM is not as fast as moving the cursor in *Lotus 1-2-3*. (This difference, according to the publishers, is due to ST's requirement for 32K of memory for the screen display as compared with IBM's 2K to update the screen.)

The Lotus Access System (containing the programs for printing graphs and managing files) has no exact equivalent in *VIP*. *VIP* does include a graph printing program, which is, incidentally, easier to use than Lotus's. *VIP* does not include a file manager program, though the operating system of the ST would seem to perform these functions with alacrity.

One problem I experienced was loading *VIP GEM* on my 520ST. Time after time the program would not load correctly. I later discovered that this is due to a memory limitation. My solution was to not load the desktop system, which allowed enough memory for the program to load. The user's guide does not specifically state that you must boot up without desktop in order to successfully load *VIP GEM* on a 520 machine, so be warned in advance. The manual does say that power users should upgrade the 520's memory to a full megabyte. This you can believe.

One item that I did not have the resources to evaluate was the claim of 100% compatibility between VIP and Lotus worksheets. Transferring programs between ST and IBM PC or compatible machines would involve a telecommunications program or a 5 1/4" IBM compatible drive connected to the Atari ST.

A part of any serious business software is the support that the company provides. Since the change in location to Canada for the customer support services, my experience has been that the phones have been promptly answered by someone interested in helping me resolve my problem. Previous to this move, I had tried several times to obtain support from the California location, but never had anyone answer the phone. So, let's call the new support a complete success,

TEXT vs. GEM VERSION

Current owners of *VIP* text version may be curious to know what improvements have been made in the GEM version. First, GEM loads to display black text on white background rather than the white on black of the text version. Additionally, the help screens have now been made context sensitive, so that they respond directly to the function that the user is in when the help key is pressed. Screen updating is supposed to be faster in the GEM version than the text version. Because my text version had to be traded in to obtain my upgrade to the GEM version, I cannot supply any time trials; however, it is still slower than 1-2-3 on a PC. Perhaps most importantly, the GEM version is not copy protected, allowing you to place the program on a hard disk or to make back-up copies for personal use. Users who wish to upgrade may do so for $19.95.

Lotus release 2 users will be interested to know that VIP Technologies Corporation intends to create a version incorporating the features found in 1-2-3's most current version. The company representative I spoke with stressed that this version is not scheduled for release any time in the near future, but that it is planned.

CONCLUSION

The GEM version of *VIP PROFESSIONAL* is a close clone of *Lotus 1-2-3* except for the GEM functions such as pull-down menus, icons, and moving the cursor with the mouse. People who cut their teeth on the GEM system, and who want a 1-2-3 work-alike spreadsheet, will probably be happier with the GEM version. On the other hand, dyed-in-the-wool Lotus users will most likely find that the GEM functions distract them -- they will do better to stick with one of the text versions. In either case, given 1 Megabyte of computer memory, the GEM or text user will find a spreadsheet capable of solving all the problems that *Lotus 1-2-3* is famous for, and in the same way as Lotus.

PROSPERO PASCAL
Does O.S.S. Need to Worry ???

Review by Andrzej Wrotniak

Most of us when talking about a Pascal compiler on the ST mean, of course, the *OSS Personal Pascal*. I've been using it extensively for almost a year at work and at home, and I understand why it became a virtual standard for the Atari ST.

The *OSS Personal Pascal* has quite a few bugs and some annoying features, but you can live with these. The manual itself is worth the price of the package as an easy introduction to GEM programming: the only one not referring you to the awful DRI documentation in the Atari's $300 Developer's kit.

I first saw the *Prospero Pascal* on a friend's machine -- double clicking on the compiler icon revealed, that what was supposed to be a *.PRG program was rather a *.TTP or *.TOS-like one. The desktop filled with text writing over the nice gray background we are so accustomed to -- and that was it. I didn't like it from the very start. The reasons are simple. On the ST a PAS.PRG name suggests a GEM application which this compiler is not. This is not nitpicking. The Prospero Software people claim to be professional language specialists, and they should be able to avoid such confusion.

Can you have confidence in a company which sells you an advanced product without even providing a decent user interface for it?

I didn't like it. I didn't want it. So when Joe Waters asked if I'd write a review of the *Prospero Pascal* for the Current Notes, I said, "Yes, with pleasure, but expect me to be rather more frank than polite". Here we are, two months after, with all the good and bad impressions -- and unavoidable comparisons with the *OSS Personal Pascal*.

I. USER INTERFACE

As I have already remarked, this feature is practically nonexistent in *Prospero Pascal*. This is a grave marketing error, because a good user interface sells the product more effectively than expensive advertising, and a bad one can deter a potential user/buyer from taking a closer look.

The easiest way to get the compiler started is to rename it to PAS.TTP and run it, entering the source file name on the TTP dialog box together with one-letter abbreviations of compiler options. The latter I always find annoying, especially when working with more than one compiler. Remembering these magic letters (A for range check, or G for log file output, etc.) may not, however, be necessary: press [RETURN] without entering anything, and the compiler will prompt you for all option settings. Writing a simple, OSS-like shell for *Prospero Pascal* is not difficult: mine (written, of course, in *Prospero Pascal* itself) almost works, and one day I'm going to finish it. Why didn't somebody from Prospero (knowing their GEM interface much better than I) do it?

OSS supplies their own editor. Prospero recommends using any ASCII editor of your choice -- I use the STEDT (which is a version of XEMACS with keys bound in a quasi-VAX/VMS EDT fashion). It is quite good (and public domain!), easy to use, has multi-windowing -- as a matter of fact I've disconnected the OSS editor from their compiler shell and hooked in the STEDT instead.

On the other hand, Prospero includes a library manager in their package -- and this is quite an advantage, especially for large projects. Ironically, here OSS recommends using the DRI librarian (and spending $300 to get it!).

II. DOCUMENTATION

The compiler comes with a large manual, which may serve as a Pascal reference, though most important are the descriptions of the extensions to the language standard, and of the system operation.

The extensions and other implementation-specific features should, I believe, be described instead in a single section for the users familiar with standard Pascal -- to spare them the need to read the whole book.

The instructions on how to run the compiler and linker are complete, but not too clear. They are in Part III of the manual, and you may be lucky enough to find them -- the initial table of contents lists only Part I.

Unfortunately, the Atari-specific GEM library documentation is not included: a listing of subroutine names and parameters (without even comments) plus three pages of text (mostly referring you to sections of Developer's Kit manuals) cannot be called documentation. The procedure and parameter names correspond, luckily, to the Alcyon C ones, so if you have experience with GEM programming from other languages (even from the OSS Pascal with its own high- level routines), you may still be OK.

Requiring a Pascal programmer to spend an extra $300 for a C compiler with necessary documentation does not seem reasonable. As a bare minimum you would need the Abacus and Sybex GEM reference books.

By comparison, the OSS Pascal manual does not require any additional material; without wasting much space it explains not only the procedure calls, but also the basic principles of the GEM operation. A big point for OSS.

With this -- quite important -- exception, the Prospero manual is good, no-nonsense and complete.

III. GEM INTERFACE

To complete my list of complaints, let's mention the Atari ST system calls in *Prospero Pascal*.

As I've already said, the procedure and parameter names correspond to ones in Alcyon C -- a principle applied in many other compilers, as well. In this respect, *Prospero Pascal* is no worse than most of the language implementations for the ST, and things seem to work well, if not in the most convenient way.

Luckily, with the excellent modular facilities of *Prospero Pascal* (see below), one may invest some time and effort into writing a library of frequently used higher-level routines. Still, I would prefer Prospero to do at least some of this work for me, as is the case in OSS Pascal. Try to check the status of a dialog button from both compilers, and you will see the difference!

But the superior GEM interface in *Personal Pascal* is the main reason I am not moving over to Prospero. This, however, may not be a deciding factor for those of you who are already familiar with GEM calls in the Alcyon C standard, or for those who want to use the language without accessing the GEM and graphic features. Anyway, another quite important plus for OSS.

IV. LANGUAGE IMPLEMENTATION

This is a very good implementation of the ISO Level 0 Pascal (no dynamic arrays as parameters -- in the conformant or any other version). All features of the standard are included, and many useful extensions are provided (they may be switched off by setting a compiler option). Some of the more important are listed below:

(1) LONGREAL type with about 16 decimal digits of precision (standard REAL type gives about 7 digits). For many numerical applications this is a real advantage over *OSS Pascal* (claiming 11 decimal digits of precision, but providing only 7 or less in standard function results).

(2) OTHERWISE clause in the CASE statement (as in OSS).

(3) STRING type of dynamically assigned length (only the maximum length has to be declared) up to 31767 characters -- *OSS Pascal* handles up to 255.

(4) String-handling procedures: Length, Copy, Delete, Insert, Pos, Str (integer-to-string conversion) -- the OSS is missing only the last one.

(5) Addr(x) -- returns the address of variable x (x may be also any structure, e.g. a record).

(6) Move(from, to, length) -- a procedure for assignment without type checking (on a bit-by-bit basis). [Some extensions relating to program modularization will also be discussed in the next section -- read on!].

A nice set of file-handling procedures is provided, as well. Two of them deserve your special attention: (a) Append -- open an existing file for writing just before the end-of-file mark -- very useful! (b) RamFile -- open a work text file in RAM.

One strange omission is an absence of 2-byte INTEGER type (a 4-byte length is standard here). Declaring a subtype is not quite the same thing -- for example, the parameter and function result return is still performed on the 4-byte basis. This is, however, a minor flaw, and -- generally -- *Prospero Pascal* here makes a slightly better impression than OSS.

V. MODULAR PROGRAM STRUCTURE AND LIBRARIES

The absence of independent module (or segment) compilation in the Standard Pascal is one thing which makes it practically useless for serious applications. Luckily, most implementations (with a notable exception of *Turbo Pascal*) include this feature as an extension to the standard, so you may compile modules separately, or -- using a library manager -- include them into libraries.

And here is where *Prospero Pascal* shines. Not only does it allow you to compile modules (packages of procedures) separately, but also includes two extremely valuable features absent in *OSS Pascal*: (1) COMMON objects (not unlike these from common blocks in FORTRAN, though identified by name rather than by position). Declaring a variable (or structure) as COMMON has two important effects: (a) makes it accessible from any other module, where it was also declared as COMMON; and (b) makes it immortal -- i.e. its contents will be preserved until the program termination (so it may carry information between successive calls of the same procedure). (2) Objects global at the module level. [This feature is undocumented in the Prospero manual, but I use it without any problems -- as yet]. If a module contains more than one procedure, a variable declared at the module level (i.e.before procedures themselves, as "normal" global ones in the main program) will be accessible from all procedures in the module. Thus, it may be used to carry information from a procedure to a procedure -- without being declared as COMMON.

In principle, passing the data as COMMON would do here, too, but this requires keeping track of reserved names, and the objects would not be as well protected from being modified.

The feature (2) above is exactly like the one in

Modula-2, and I miss it badly in the *OSS Pascal*. The latter allows you to declare global objects in modules, but in a clumsy way: if you use any global variable (or structure) in a module, you have to declare therein all variables from the main program. This would, of course, destroy the re-usability of modules, taking away almost all advantages of the modular approach to program construction.

As noted, an additional advantage of the *Prospero Pascal* is the library manager, enclosed in the package. If you create a library, only the procedures your program needs will be linked to it, whereas with a non-library module they will be included as a whole, even with procedures your program does not refer to. Thus in the area of modularization Prospero has definite advantages over OSS.

VI. PRL -- A NUISANCE OR A BETTER MOUSETRAP?

Before running any of the programs in the *Prospero Pascal* package, or before running any program written in it, you should run PRL.PRG -- a program installing the memory-resident Prospero runtime Library. You need to do it just once (e.g. from the AUTO folder), but still -- it may be a nuisance.

The only advantage of this solution might be (in addition to shorter total loading time for multiple program runs) more efficient usage of computer memory -- but only in case of more than one program residing there at the same time -- as e.g. a "regular" program plus a couple of desktop accessories (I still can't write them in *Prospero Pascal*, anyway). All of them would have to be written in *Prospero Pascal* (or *Prospero Fortran*, using the same runtime library), which does not happen often.

On the other hand, the resulting programs are not really stand-alone applications: if you sell them, or give them away, the PRL has to go along.

What? To give away (or sell!) somebody else's copyrighted software? The "PLEASE READ ME OR YOU DIE" note in my *Prospero Pascal* package says explicitly that the licensee (this means yours humbly) can use the proprietary material (this means the goodies) on a single computer under a non-exclusive, non-transferable license from the licensor (this means Prospero), and -- with exception of his own backups -- will not copy or permit the copying of ANY of the proprietary material (i.e. the goodies again, including the infamous PRL). More, the Software may even include -- they warn me -- a self-destruction mechanism (blowing me up, or what?).

If I remember well, somebody reported talking to Prospero representatives on this subject, and they said OK, PRL is free. Was it not a misunderstanding? They have been selling their ST products for a year or more -- enough time to include at least a piece of paper with each package, explaining what is what. Wouldn't it be better than threatening me with a self-destruction mechanism?

VII. THE BOTTOM LINE

After a closer look, the Prospero compiler turned out to be a solid tool -- at least as my limited experience indicates -- of professional quality. Removing the PRL oddity, improving the Atari-specific documentation, and -- maybe -- adding some higher-level GEM routines would make it a very nice package, indeed.

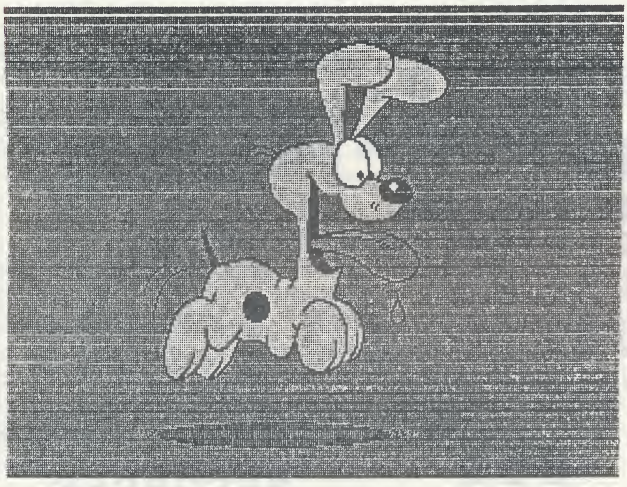
If you are looking for an ST Pascal compiler, my advice (putting aside the difference in price: *OSS Pascal* is two times less expensive) would depend on the kind of programming you are going to do: * For number crunching, programs not making use of GEM, and large programs (say, more than 5-10 thousand lines), where modularization and libraries are useful, I would recommend *Prospero Pascal*; * For programs accessing GEM features (including desk accessories), *OSS Pascal* is a much better choice.

This may change: my review is based on Prospero's version 1.14mmg (and OSS v.1.11). Since last November, OSS has been promising they will issue a significant upgrade. I hope they will come out with a major improvement, if they want to keep their lion's share of the ST Pascal market. Hopefully, Prospero will not sleep, either.

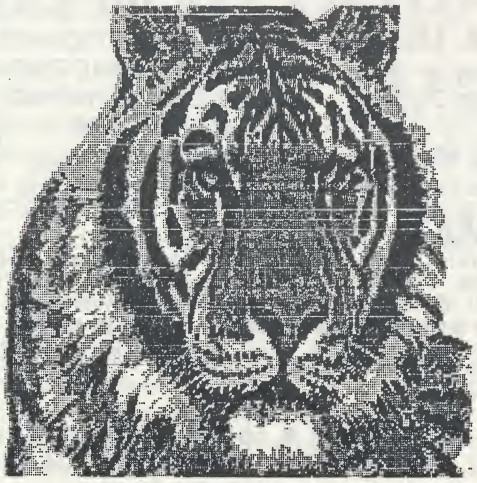
THE ST ART GALLERY

by David Mumper

The two new picture disks for this month are Cartoons #2 and Animals #1. On cartoons #2, you will find pictures of characters such as Garfield, Heman, The Xmen, and others. Some of the extremely notable ones are the six Heman pictures done by John Semenek (from the SCAT BBS in Chicago.) John has done many pictures using the Computer eyes digitizer on the 8-bit Atari to digitize the pictures, then porting them over to the ST. He takes up to five shots of the same object, changing the lighting for each. Then combines four of the graphics mode 8 pictures into one picture on the ST, which gives him a 16-level grey-scaled picture. The heman pictures (I'm assuming) were done using this technique.



On the Animals disk, you'll find some factual, as well as fanciful, animals. Varying from Fish, to Gorillas, to Flying Horses, these are the best I've seen so far. If you have some pictures you'd like to see on a disk in the Current Notes library, please send them in, we're always looking for nice pictures to add in. Once again, these are all color pictures.



Now, back on the subject of pictures, it's time to continue with last months discussion. Throughout this section, we'll be discussing things as they would be on a Low-resolution screen. Now, we know that each of the resolutions are divided up into planes; four for low res, two for medium res, and only one for monochrome. But how does the ST keep them in memory? As a programmer, you might wish that they were just as plain and simple as the old 800, but your wish would go unfulfilled. Rather than having the memory all contiguous, the planes are jumbled all together in what is known as an Interleaved Bit Plane. What this means is that all of the planes are mixed together, so that instead of having four bits used for each pixel, with each pixel kept all in one place, each of the pixel values is split and stored in four different bytes. Next, you also have to contend with the fact that each of these bits aren't even kept grouped together by which position they are from in the pixel value. The computer has 8,000 bits used for each plane, but even these groupings of 8,000 bits are mixed together. The pieces of each of the planes are stored alternating with the others, so you end up with two bytes of plane 0, followed by two of plane 1, then two of plane 2, and two of plane 3, then it starts over from the beginning, as many times as needed to store the whole 32,000 bytes.

Now the easiest way to look at the screen is in groupings called WORDS, or Integers. Each WORD is 16 bits (or two bytes) of memory. Starting at the beginning of the area of memory used for the screen, the first WORD (WORD 0) represents the Low order bits of the first 16 pixels on the screen. The pixels start at the upper left hand corner, and go to the right. The next WORD, is the second bit from each of the first 16 pixels, followed by the third, and the fourth sets before cycling back to the next group of pixels first bits starting in WORD 4. Lets look at an example: Say the colors of the first 16 pixels go from 0 up to 15 (0,1,2,3, ... ,15). The binary representations would be 0000, 0001, 0010, 0011, 0100, 0101, 0110, 0111, 1000, 1001, 1010, 1011, 1100, 1101, 1110, 1111. The computer would take these pixels, and store them in memory like so (remember bits in a byte are numbered from right to left):

```
0101010101010101 0011001100110011
     Word 1           Word 2

0000111100001111 0000000011111111
     Word 3           Word 4
```

If we lay the bits in each word out vertically, the pattern will be a little easier to see:

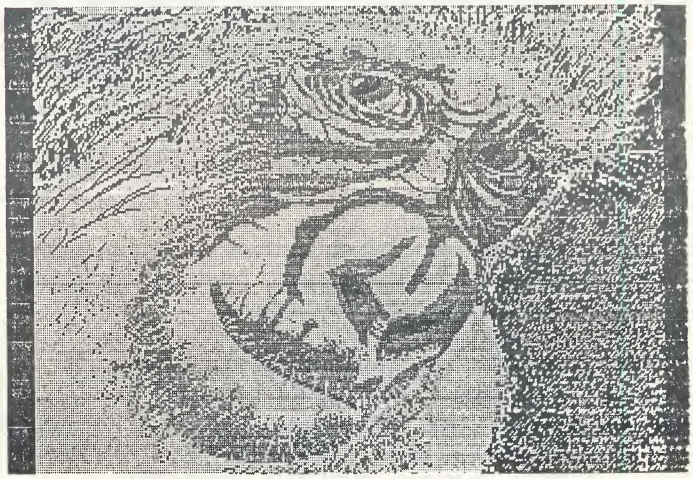
	Word 0	Word 1	Word 2	Word 3
Bits of Pixel No. 1:	0	0	0	0

```
Bits of Pixel No. 2:    1   0   0   0
Bits of Pixel No. 3:    0   1   0   0
Bits of Pixel No. 4:    1   1   0   0
Bits of Pixel No. 5:    0   0   1   0
Bits of Pixel No. 6:    1   0   1   0
Bits of Pixel No. 7:    0   1   1   0
Bits of Pixel No. 8:    1   1   1   0
Bits of Pixel No. 9:    0   0   0   1
Bits of Pixel No.10:    1   0   0   1
Bits of Pixel No.11:    0   1   0   1
Bits of Pixel No.12:    1   1   0   1
Bits of Pixel No.13:    0   0   1   1
Bits of Pixel No.14:    1   0   1   1
Bits of Pixel No.15:    0   1   1   1
Bits of Pixel No.16:    1   1   1   1
```

The listing at the end of this months column is an assembly language routine that can be used with your C programs (and other languages where you can include assembly) that is a very fast pixel get routine. This was written and tested using the Alcyon C compiler from the Atari Development package, and should work with most other assemblers with minimal or no changes.

Starting next month, we will begin covering some of the picture files formats used by many of the drawing programs available for the ST (and maybe even the MAC and Amiga) today.

```
     .globl     _get_pixel
*********************************************************
* Calling convention from C: color = get_pix(x,y,r,s)*
* Where:  x = x coordinate, Integer                     *
*         y = y coordinate, Integer                     *
*         r = Resolution of screen, Integer             *
*         s = Address of screen, Long                   *
* Note:  The memory can be anywhere as long as it is *
*        in the standard ST format. You can point to *
*        a screen buffer that is not displayed, or   *
*        isn't the same resolution as the current    *
*        screen.  Just make sure you pass the correct*
*        resolution.                                 *
*********************************************************
* Uses: D0 - Working area for many things
*       D1 - Shift value, used for moving bits
*       D2 - Calculated pixel value
*       D3 -
*       A0 - Pixel byte address
_get_pix:link R14,#0
pi2:
 move.l  14(R14),A0  -Put screen address in A0
 move.w  10(R14),D0  -Get Y coordinate
 mulu    #80,D0      -Multiply by 80 bytes per line
 cmp     #2,12(R14)  -Check if working in mono
 beq     mono
 asl     #1,D0       -If not, 160 bytes per line
mono:
 adda.l  D0,A0       -Add Y offset to screen address
 move    8(R14),D0   -Get X coordinate
 and     #$FFF8,D0   -Mask out low 3 bits
 move    12(R14),D1  -Get res
 addq    #1,D1       -To get actual byte offset, shift
 asr     D1,D0       -  right by res + 1 bits
 cmp     #3,D1       -Check again for Mono Res
 beq     pcont1      -If so, no mod needed
 cmp     #2,D1       -Check if Medium Res
 beq     pcont2
 btst    #2,D0       -If Low Res, check if on 2nd byte
 beq     pcont1
 eor     #5,D0       -If so, swap it
 bra     pcont1
pcont2:
 btst    #1,D0       -If Med Res and 2nd byte
 beq     pcont1
 eor     #3,D0       -If so swap it
pcont1:
 adda.l  D0,A0       -Add x offset into screen address
*                    -we now have start byte location
 move    #3,D0       -Default loop 4 times
 move    12(R14),D1  -Get res
 asr     D1,D0       -modify loops by # of planes-4,2,1
 clr.w   D2          -Clear out the pixel value
 move    8(R14),D1   -Get X Coordinate again
 and.w   #7,D1       -Mask out byte location, get bit
*                    -  within byte
 eor.w   #7,D1       -Bits are 76543210, X Coor is
*                    -  01234567, so swap
ploop:
 move.b  (A0),D3     -Get byte pointed at by offset
 asr.b   D1,D3       -Shift it down so the bit we want
*                    -  is rightmost
 roxr.w  #1,D3       -Shift it out into the X register
 roxr.b  #1,D2       -Shift X register into pixel value
 lea     2(A0),A0    -Add offset for next bit in pixel
 dbf     D0,ploop    -Loop if needed
 move    12(R14),D1  -Get res
 move    #28,D0      -Binary 11100
 asr     D1,D0       -shift to 11100 Low, 01110 Med,
*                    -  00111 Mono
 and     #7,D0       -Mask to 00100 Low, 00110 Med,
*                    -  00111 Mono
 asr.w   D0,D2       -Move the color value from high
*                    -  4 bits to low
 move    D2,D0       -Set return value for C
 unlk    R14
 rts
```



CURRENT NOTES ST LIBRARY

[Note: the programs on these disks are either public domain, or copyrighted but distributed freely to the public (e.g. AtariWriter and NEOCHROME), or shareware products where the authors would like an additional payment if you decide you like their products. Numbers not listed have been discontinued. Disks are $4/each. Include $1 for every 6 disks for postage. Order from CURRENT NOTES LIBRARY, 122 N. Johnson Rd., Sterling, VA 22170.]

UTILITIES

#18: UTILITY #1. 34 misc. utility programs
#25: DEGAS UTILITIES. fonts, pr drivers, conversion prgs.
#30: UTILITY #2. Assembler; Forth-83; printdir; Labels...
#36: DESK ACCESSORIES. calendar, clocks, screen snapshot.
#61: PRINTER DRIVERS. First Word, ST Writer, Degas
#63: UTILITY #3. WP desk acc,floppy indexer,file squeeze.
#72: UTILITY #4. Format/copy 400K/800K;proff; desk accs..
#73: UTILITY #5. archiver; disk lib prgs; disk speed x...
#81: UTILITY #6. dir lister;quick formatter; Font Editor.
#94: UTILITY #7. print out strips of picture files,.....
#95: UTILITY #8. format inc capacity on SS/DS disks.....
#102: UTILITY #9. bulk erase, disk format acc, disk labels
#107: ST RAM DISKS. 25 ram disks + 7 auto loaders
#113: UTILITY #10. HD backup; undeleter; format3'''
#117: DESK ACCESSORIES NO. 2. acc load, format, kalklock
#121: UTILITY #11. address bk, text browser, format.gem..
#126: PUBLISHING PARTNER UTILITIES. Helvitica + pr.driver
#127: ST FONT EDITORS/LOADERS. Font loader, GEM FONT ed.
#131: UTILITY #12. Programmer's Utility Disk: uudecode, uuencode, bucket, kill scach, make, setinit, verify, volume, case, mase, 1_filepr
#132: UTILITY #13. Disk library prg (DISKCAT), Editors (LESS & VIX), disk copy programs (AUTODISK, DCOPY), startgem, access, rocp.

GAMES

#21: GAME DISK #1. (Color/Mono) Megaroids, Mastermind, Othello, Backgammon, Ripcord, Target, Life, Journey.

#37: GAME DISK #2. (Color) BASIC Games(Bomber, Scratch, Switchbox), Celestial Caesers, Ripcord, Score4, Battleship, Blackjack, Mad Libs, Maze Maker, Mylife, Box the Dragon, Mastermind, hints for SUNDOG.
#39: ARCADE DEMOS. JOUST, TIME BANDITS, and CRACKED.
#54: MONO GAME DISK #1. PuzziePuzzle
#62: HACK. Dungeons and dragons like game
#80: MONO GAME DISK #2. Monopool; Krabat Chess game.
#100: GAME DISK #3. (Color) Football, Break Out, Missile, 4 Adv. Games (Larn, Magnon, Twilight Zone, & Ogre).
#101: GAME DISK #4. (Color) Atartrek, Celestial Caesars (new ver.), Krabit (chess), Twixt, ST Aggrevation.
#112: GAME DISK #5. (Color) Checkers, slot Machine; Warzone,,,
#122: GAME DISK #6. (Color) Haunted House, Monopoly, Backgammon
#135: SHANGAHI DEMO. (Color/Mono) Fascinating new puzzle.
#139: MONO GAME DISK #3. Larn2, Ogre, Ataritrek, Maze Maker, Checkers, Battleship, Window Ball.

PICTURES

#40: TINY COLOR #1. 20 Pictures
#41: TINY COLOR #2. 26 Pictures
#42: TINY COLOR #3. 24 Pictures
#48: TINY MONO #1. 17 Pictures
#51: TINY COLOR #4. 29 Pictures
#52: TINY COLOR #5. 21 Pictures
#65: TINY COLOR #6. 22 Pictures
#75: TINY COLOR #7. 16 Pictures
#96: TINY COLOR #8. 17 Pictures
#108: TINYPICS NO. 1. GHOST BUSTERS; RAIDERS
#109: TINYPICS NO. 2. EMPIRE STIKES; SHUTTLE
#118: TINYPICS NO. 3. SCI-FI
#119: TINYPICS NO. 4. VEHICLES
#120: TINYPICS NO. 5. CARTOONS #1
#137: TINYPICS NO. 6. CARTOONS #2
#138: TINYPICS NO. 7. ANIMALS

TERMINAL PROGRAMS

#84: ST TERM DEMO DISK. Demo of V 2.1; 2 more term prgs
#88: TERM PRGS #3. UNITERM VT100 EMULATOR, Version 1.7B

GRAPHICS

#64: DOLL ANIMATION DEMO. Spinning dolls demo, 1Mb-color
#66: GLOBE DEMO DISK. Spinning globe + more... 1Mb-color
#67: BALL/BIRD DEMO. Bouncing ball & flying bird demo
#77: CAD 3D ANIMATION DEMO. Fractal Mountain
#85: SOUND/GRAPHICS #2. stspeech, music player w/files
#90: SHINNY BUBBLES. Color demo shown at COMDEX '86
#104D: ALADDIN ST DEMO DISK. Stunning graphics.
#105: CN MOVIE. Make it Move Demo
#115: ANIMATOR DISK. Aegis Animator Player w/4 ARC'ed routines to play.
#128: STEELY BOINK. Ray-tracing demo.
#129: SPHERES! DEMO (Color) Another super animated ball demo.
#136: MICRODEAL DEMO PROGRAMS. Demos of Goldrunner, Tanglewood, Airball, and Sprite Construction Kit.

MUSIC

#34: MUSIC ON YOUR ST. ST MUSIC BOX, Dix Piano Player
#60: MUSIC STUDIO SONGS. 50 songs for MUSIC STUDIO
#76D: SOUND DIGITIZER DEMO. by Print Technik, 1Mb, color
#78D: DIGI SOUND DEMO #1 OXYGEN (By Hypnosis) 1Mb
#79D: DIGI SOUND DEMO #2 FOREIGN AFFAIR (M.Oldfield) 1Mb
#99D: DIGI SOUND DEMO #3 MATT'S MOOD (Matt Bianco) 1Mb
#114: MUSIC STUDIO 'SNG' DISK #2. 40+ songs
#134: ST-REPLAY. Digitized sound demo.

LANGUAGES

#8: SAMPLE "C" PRGS #1. 17 C programs w/source
#9: SAMPLE LOGO PRGS. 30+ LOGO programs.
#22: SAMPLE BASIC PRGS. 17 BASIC prgs, command summary
#31: PASCAL & MODULA-2. OSS files, + various demo prgs
#33: SAMPLE "C" PRGS #2. 12+ C programs w/source
#49: SAMPLE PASCAL PRGS #1. 46 PASCAL files.
#53: ATARI ST FORTH-83 MODEL. by Laxen & Perry
#71: FORTHMACS Ver 1.1. (c) 1986 by Bradley Forthware
#82: SAMPLE "C" PRGS #3. 13 C programs w/source

#83: SAMPLE MODULA-2 PRGS #1. Shell for ARC.TTP +.....
#92: SAMPLE MODULA-2 PRGS #2. ST Speech Modules +.....
#93: SAMPLE PASCAL PRGS #2. spelling checker source...
#97: LITTLE SMALLTALK. language, editor, manual, prgs
#98: XLISP V1.7. language, manual, editor, C source ..
#110: MODULA-2 SAMPLE DISK #3. AES Library modules.....
#111: PASCAL SAMPLE DISK #3. source to ATARTREK...
#123: SHAREWARE C COMPILER. C, editor, ramdisks, etc.
#124: ATARI ST ICON LANGUAGE, V6.3. by Fonorow & Nowlin
#130: SAMPLE GFA BASIC PROGRAMS #1. GFA Run only ver., Terminal prg., Sprite ed., Torpedo game, Fractals, Archsell, Format2, Graphics Demos
#133: SAMPLE C PROGRAMS NO. 4. Source code to uudecode, uuencode, kermit.acc, citadel bbs & utilities and a spreadsheet program.

APPLICATIONS

#15: ST WRITER, Ver 1.71e. ST WRITER with all doc files
#29: MICROEMACS. Ver 3.7i. editor, ref man, tutorial
#59: VIP TEMPLATES. 20 VIP templates
#68: CAD 3D PICTURES. 12+ picture files for CAD 3D
#69/70: GRAPHIC ARTIST DEMO. Ver. 1.52.
#74: ST SAMPLER #1. Demos of Synsoft's Gen Ledger, SOLAPAK, and TechMate Chess prg; more ...
#89: SPANISH ST WRITER. (c) 1985
#91: BOFFIN DEMO DISK. demo of BOFFIN word proc prg
#103: SKYMAP. 1,560 of the brightest stars.
#106: SMOOTH TALKER DEMO. 5 talking educational prgs.
#125: GERMAN ST WRITER. (c) 1986
#135: SHANGAHI DEMO DISK. Try and solve this fascinating new puzzle. Color or mono.
#136: MICRODEAL DEMO PROGRAMS. Demos of Goldrunner, Tanglewood, Airball, and Sprite Construction Kit.

CPM EMULATOR

#86: CP/M-80 EMULATOR TOS DISK. CP/M-80 V2.2
#87: CP/M-80 DISK #1. Disk in CP/M-80 format: 24+ prgs
#C1: CP/M-80 TELECOM DISK #1. mexst & docs
#C2: CP/M-80 UTILITY #1. 45 utility files
#C3: CP/M-80 GAMES #1. adventure, aliens, blkjak...

MACINTOSH (MAGIC) DISKS

These disks contain Macintosh programs for use with the Magic Sac on the ST. Disks are already in Magic format and can be used directly.

#M0: MAGIC SAC 3.5. (beta of ver. 4.0).
#M1A: FINDER 4.1 STARTUP (BOOT) DISK.(for 1-Mb STs).
#M1B: FINDER 1.1 STARTUP (BOOT) DISK.(520ST/1040ST).
#M2: TELECOM DISK #1. Free Term, Termworks, Kermit
#M3: UTILITY DISK #1. Switcher, PackIt, Slicer, ...
#M4: GAME DISK #1. 12 games.
#M5: DISK LIBRARIAN. Disk Librarian Ver 1.81
#M6: GAME DISK #2. 8 games.
#M7: GAME DISK #3. 6 games.
#M8: DESK ACCESSORIES #1. DA Tester, F/DA Move, ...
#M9: UTILITY #2. File Hacker, ResEd, RamStart 1.3...
#M10: GRAPHICS #1. Painter's Helper, Moire 3.0, ...
#M11: PRINT UTILITIES. Chooser, Fast Eddie, ...
#M12: MACBILLBOARD. Mac Paint Clone (Shareware).

ANALOG DISKS

#A41 (Apr '86) anykey, mod1, mod2, mod3, mod4, sort, num2prt, strings1, stcheck, gemdemo, scratch, pics(boat, daffy, desert)
#A42 (May '86) craps, sounder2, colors512, celest, popcorn, pics(stlog41, after, davros, gerwalk, zgundam)
#A43 (Jun '86) arrays1, arrays2, calcpi, guesnum, mandel, calculat, doodler, sampler, pics(parts, circus, escher), target.prg
#A44 (Jul '86) 3ddemo, twogame, pianokbd, fraction, input, funchelp, pics(fish, gorilla, porsche, stlog4, countach)
#A45 (Aug '86) ccdemo, dixplano, image, numbers, pointer1, pointer2, superbox, st solid states.
#A46 (Sep '86) minos.acc, dx.ttp, dx.a, format+.bas, dmdemo.prg, pics(utterfy, demon, eagle1, madonna, phantom, rick1, speed)
#A47 (Oct '86) cmanship, puzzle, windows, ezsq, biclock, yahtezee, fortune.acc, pictures.
#A48 (Nov '86) stboxes, ballit, stocks, graphics, graphpro, pics(epsgem, necpro, shuttle)
#A49 (Dec '86) vdidemo, dragon, fax, poolmono, life, pics(fgordon, kolbolnk, porsche, wizrdc1, stlog49)

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NEW DISKS FOR MAY
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#129: SPHERES! DEMO (Color) Another super animated ball demo.
#130: SAMPLE GFA BASIC PROGRAMS #1. GFA Run only ver., Terminal prg., Sprite ed., Torpedo game, Fractals, Archsell, Format2, Graphics Demos
#131: ST UTILITY DISK NO. 12. Programmer's Utility Disk: uudecode, uuencode, bucket, kill scach, make, setinit, verify, volume, case, mase, 1_filepr
#132: ST UTILITY DISK NO. 13. Disk library prg (DISKCAT), Editors (LESS & VIX), disk copy programs (AUTODISK, DCOPY), startgem, access, rocp.
#133: SAMPLE C PROGRAMS NO. 4. Source code to uudecode, uuencode, kermit.acc, citadel bbs & utilities and a spreadsheet program.
#134: ST-REPLAY. Digitized sound demo. Sound on color or mono, pic on color only.
#135: SHANGAHI DEMO DISK. Try and solve this fascinating new puzzle. Color or mono.
#136: MICRODEAL DEMO PROGRAMS. Demos of Goldrunner, Tanglewood, Airball, and Sprite Construction Kit.
#137: TINYPICS NO. 6: CARTOONS #2
#138: TINYPICS NO. 7: ANIMALS
#139: MONOCHROME GAME DISK NO. 3. Larn2, Ogre, Ataritrek, Maze Maker, Checkers, Battleship, Window Ball.

SPELLER BEE
Say It Again, ST!

Review by Bill Moes

Yes, it talks! Software synthesized speech is the key in *Speller Bee*, a spelling practice program for students in elementary and junior high grades.

Speller offers an introduction which thoroughly guides the user through the various menus and choices within the program. Then, where else to start but by making your list of words to study.

Enter up to ten words in a list. Each word you enter is displayed on the left of the screen; it's also shown on the right in the Sounds Like part of the screen. As *Speller* does have trouble pronouncing some words, Sounds Like is very useful in correcting the program's pronunciation. Simply type word parts in place of any syllables which do not sound correct. Younger children may need help with this. Save up to 32 lists on the disk; unneeded ones may be erased. After you've saved your list, it's off to the actual spelling practice.

WHAT'S THERE DO DO, MOM?

A couple of learning activities are rather direct in implementation. In Bee Prepared you will listen to the word, see it spelled, and then have the chance to spell it yourself. This is the most beneficial of the software's activities in terms of actually learning a spelling, although it won't exactly flush the lines with adrenaline. A second activity, Spelling Bee, runs like many school spelling bees. The word is said and you spell it.

Three games are provided. In Detective, a word from your list is shown with question marks in place of some missing letters. Complete the word by clicking on the correct letters from the alphabet listed below the word. If your list has words of similar spellings, it may be impossible to tell one word from another and this activity may not be useable for that list.

A second game, Scramble, shows your word in scrambled form and you need to type the word correctly. As your typed entry is directly below the scramble, it's easy to tell whether you've used all the letters. Clues are available for this one, including the chance to have the word said, see the entire word list, or see the word itself.

The third game is a word hunt (Search). The words are written either down or across (L to R). With only ten words in a list and not much variety in the way words are hidden, this one seems to have little to recommend it for older students.

For those who want to move quickly into the action, *Speller* has 15 word lists prepared on the disk. Although they're divided into levels of difficulty, they won't be of much help in preparing for school and it may be difficult to understand the words unless you've taken a good look at the list first. I imagine students who use *Speller* to prepare for their own tests or quizzes will not have much use for the ready-made lists.

UNDOCUMENTED FEATURE

With the ability to correct pronunciations in Sounds Like when first making a word list, another opportunity is offered. Instead of a corrected pronunciation, it's quite possible to enter a *defi- nition* of the word. You will, however, need to make sure your definition does not exceed the 20 or so spaces allowed for each entry in the Sounds Like section. Voila! Instant vocabulary practice. Go to the Spelling Bee activity where the definition will be said and you'll have the opportunity to correctly enter the word. Depending upon the words and your goals, it may be helpful to have a printed copy of your word list nearby.

Certain shortcuts are allowed when putting a list together. Keyboard symbols (such as #, @, <, >, %, $, *, -, +, ^) are interpreted as words when spoken. And punctuation marks (!, ., ?) provide varied stress when the word or phrase is said.

The documentation is a 43-page booklet which clearly explains the program and offers ideas to parents on how to make the best use of the software. It also includes lists of the words found on the disk and other words often misspelled. Nicely done.

THE CLIPPED WING SECTION

However, not all here is *Bee*autiful. The quality of speech in *Speller* is of some concern. It has a decidedly Scandinavian accent and often comes across like it's had one too many nights out on the ice. My daughters, who objected to it more than I, found that it became more intelligible and acceptable with use. I would advise that you audition the sound before a purchase. That audition is offered on the CURRENT NOTES ST Library disk #106. Get the disk; give a listen.

The medium-res graphics are dull, but at least they won't distract anyone. Various menu and activity screens take a long time to be presented, something like five to fifteen seconds for each. When the *print* option is available within the program, it does nothing more than a screen dump. This is the same thing you could

accomplish with the <ALT> and <HELP> keys. It is disheartening to note that the disk is copy protected, although the key-disk method is used so you may transfer the files to a hard disk drive or a backup disk and use the master disk only for program verification. Finally, as your child may quickly point out, *Speller*'s 10-word limit in each list is not going to cover everyone's school list.

An update to correct most of the above problems is planned, but not scheduled for release until August or September, according to Mark Schott, VP Sales and Marketing for First Byte.

The problems may or may not be of great importance to you. The real magic here is in the speech. No special and costly add-ons: the voice lives on a disk.

SOMETHING ELSE FOR YOUR EAR

And it's not the only disk with that voice. In addition to *Speller*, First Byte has other offerings for the ST. *MathTalk* helps students aged 5-12 with math problems using whole numbers. A talking word processor, *KidTalk*, is designed for the writing of kids aged 3-13. And *First Shapes* helps younger children, aged 3-8, understand the important basic geometric shapes. In next month's issue of CN, we'll take a look at the four basic operations in *MathTalk*.

Four other ST products were scheduled for April release by First Byte. *MathTalk Fractions* and *First Letters and Words* are spin offs of the company's earlier releases. Another program better regarded as entertainment, *Mad Libs*, uses entered words within a story, often creating unexpected and humorous results. *Smooth Talker*, software more useful to adults, may be used to produce speech from text documents, such as those of word processors. All First Byte products retail at $49.95, except *Mad Libs* ($19.95).

As should be clear from the rapidly expanding software listing, First Byte has been very pleased with the success of its products for the ST. Schott, who termed First Byte's sales on the Atari as *phenomenal*, stated that the ST versions have outsold those on the two other 16-bit computers by 2:1 or 3:1.

Now the summary: *Speller Bee* has words to say where others have silence. The speech may be a little difficult, but it talks and it's useful. For the many students eager for help with their spelling, *Speller* could *Bee* enough.

[First Byte, 2845 Temple Avenue, Long Beach, CA 90806 (800) 523-8070; in CA (800) 624-2692]

READ & RHYME
Skills in Space

Review by Bill Moes

Read & Rhyme offers four games to help young Atari ST users, aged 5-10, practice some of the important reading skills they'll need to master.

Rhyming Rockets A three or four letter word is written across each of the three moons. Below, three rockets are poised, each ready to blast the one word which does not rhyme with the others. Slide the hand cursor over the correct rocket. Click. Moments later the moon is destroyed. Due to the colors used and the style of writing, the words are not always especially easy to read. The disk's 400 words are of two levels in this one-player game.

Flying Saucer One or two players, each in one of two levels, will attempt to complete a sentence or answer a question by selecting one of four words. The four choices are written across three moons and a sun. When the flying saucer lands on the correct response, press <RETURN>. About 200 sentences are provided. With this activity you need to wait until the saucer gets to the correct choice. This can be a frustrating wait for those who quickly know the answer. The mouse may be used to click the saucer on to another choice. The only way to select the actual answer, though, is with <RETURN>. Stick with the keys only.

Alpha Blast A list of 10 words is shown. Click on the word which would come first in an ABC listing. A second click indicates you're sure and the word is moved to a rocket. Continue. All 10 words in order? Blast-off! The one-player game has two levels.

Rhyming Challenge A word is shown, knowledge of rhyming words is challenged. How many can you name? Not exactly an easy task, even for adults. Usually the software knows somewhere around 20 rhymes for each word, so you may try some not in its list. With the key word *gun*, for example, *sun* is accepted although *son* is not.

All activities give the score (right/wrong) after completing, or ending early, each game. The variety of skills and the two levels provide opportunities for a wide age-range. The low-res graphics are colorful and the sound effects are appropriate. However, the outer space motif long ago ceased to be unusual or special and the activities lack any exciting originality. The $39.95 package may have no great innovation, but it is no complete failure, either. *Read & Rhyme* comes across merely as a mildly decent offering.

[Unicorn Software, 2950 E. Flamingo, Greenview Plaza, Suite B, Las Vegas, NV 89121 (702) 737-8862]

RELAX AND ENJOY
ST Shuffleboard and Monopoly

Well I hope you're enjoying your spring and have had a chance to clean out the garage and that you've pulled your lawn mower out of the shed to cut that grass. 'Cause its time to sit down, kick off your shoes and relax. Forget those springtime worries. This month I've found that a new program has replaced my urge to venture into the real world with the desire to enjoy my computer. I'll be reviewing *ST-SHUFFLEBOARD*, from the author of *ST-POOL*. I'll also be taking another look at last month's exceptional PD-of-the-Month Monopoly.

ST-SHUFFLEBOARD

Welcome to the world where challenging simulations replace their real-life namesakes for human entertainment. Gone are the arcade halls and parlors of the 20th century where social gaming events were common place. The reason: the advent of personal computers as powerful and inexpensive as the ST series of computers from Atari and the arrival of excellent parlor game simulations such as the new release from Shelbourne Software Systems, Inc., *ST-SHUFFLEBOARD* .

ST-SHUFFLEBOARD is much more than a simulation of the classic game of table shuffleboard. In fact, simulation is an understatement. It is a replacement for conventional shuffleboard. It accomplishes this transition by incorporating all of the vital aspects of a simulation, enhancing them, and then adds features not available with the original game.

Inside the packaging you will find the usual warranty card and program disk along with the program instructions AND an official publication from the American Shuffleboard Company, How to Play American Shuffleboard. The latter is presented to provide you with all of the rules for the many variations of playing shuffleboard as well as tips on strategy and technique, and a glossary of shuffleboard terms. The program instructions are a clear and concise guide to the features of the program and how to use them. Also provided are instructions on how to set up a house league for playing tournaments. All of this shows the thorough planning that went into this program prior to its release.

Let's get on with the actual play. After booting up the program, you are presented with a true perspective of the shuffleboard table as well as a top view of the last half of the table. Also seen are the scoreboards for each player or team. At this point, you select your opponent to be human or computer as well as the type of game you wish to play. Using a fully GEM integrated menu system, all of the options for playing are readily available using the mouse. Five of the most common variations of shuffleboard are available to play including my two favorites, Straight, or "Hangers" and Deck, which is the table version similar to that played on the ground at your local park.

Throwing the weight is accomplished by using the mouse as if it were the weight! This is the feature that makes this game so life-like. You actually have the feeling that you are pushing a weight. The smoothness of the throw combined with the suspense as it decelerates has your eyes glued to the monitor. I've found that best results can be had if you stand up and face the monitor. Not only does this make the game more lifelike, but also it will improve your game by making your throws more consistent. You should also turn your mouse pad (if you use one) so that it is longest in the direction of the throw. Also, it is important to match the speed of the weight to that of the mouse using the appropriate option. One small flaw with the program, however, is the inability to save your ideal settings to disk. To overcome this, you'll just have to remember them, and install them each time that you play.

You are also able to establish the "slipperiness" of the playing surface, by adjusting the amount of corn starch that is applied to the table. You do this using a slide bar, similar to that used on the Control Accessory for mouse response. The use of this option gives quite a range of effects. If you find that your adjustments to the weight/mouse settings don't give you satisfactory results, then this feature will likely do the trick. Another important instruction: Be gentle with your mouse, as with any game which uses the mouse. It is an expensive device to replace. Besides, jerky and quick mouse movements result in random throws.

The skill of the computer opponent is refreshingly modest. There is nothing worse than playing a game in which you always lose to the computer. With this in mind, it is very entertaining playing against the computer. And the fact that it is adjustable makes it that much better. However, just as in the real game of shuffleboard, it will take a great deal of practice to throw your weights with the consistency required to win. There is a feature built into the program that will help you along, in this regard. By using the "alternate" key, you will be able to lock the direction of your throw into place so that you don't get any last second wrist-action. However, because wrist-action is very important in the play of shuffleboard, in order to put "english" on the weight, replacing this are the left "shift" key and the "control" key. These keys allow you to curve your shots. Naturally, the faster you throw your weight, the less effect the "english" has. Before you use "english" on your throws, you should master a straight throw.

Yet more realism in the game, are the "hangers" on the edge of the table, the "feel" of the weight as it makes its way down the table (you never know if body-english helps the shot!), the wood grain of the table. Missing from the realism, however, are the sounds associated with the game. The "humming" sound as the weight travels is replaced with silence. The clicking of caroming weights is replaced with computer clicking (somewhat unimpressive, i might add). However, the most important missing sound effects are the cheers and jeers of your opponents. Anyway, these aren't features of the game itself, but would add to the excitement, if present. The solution: make your own sounds!

Some of the features that i like about this program over playing the real thing, are: an opponent is readily available (the computer); the space requirement is much less (providing you already own a computer!); and, you aren't always walking from one end of the table to the other!

i am very impressed with the programming of *ST-SHUFFLEBOARD* and the use of the mouse for throwing the weights. The combination of realistic graphics and effects with easy playability make this program a winner. if you like shuffleboard, you'll love this simulation. And at $39.95, it's less than a tenth of the price of a real shuffleboard table. Good work from Shelbourne Software Systems, inc.

PD-of-the-MONTH

There are two reasons that i'm rerunning Monopoly as PD-of-the-Month. the first is that it deserves it! The second is that by press time i hadn't found another PD game program that could follow this tough act. Instead of reviewing it, i'm going to pass on a small modification to the program that i've found makes the program much more pleasurable to play.

Are you tired of clicking your mouse to continue after each play? if you are and own GFA BASIC (required to make the change) and the GFA BASIC Compiler you can modify Procedure Z41030. Simply "REM" out the instructions "Repeat" thru to "Until B%=0". The game will play identically with the exception that your mouse button need not be "clicked" to continue, just be in the right place. you can then recompile the revised source code. Hope this helps. By the way, make sure you do this on a back-up of your program. You never know!

One tiny strategy tip for Monopoly: Do everything you can to get PArk Place and Boardwalk. The only two victories that i've had were with Hotels on these. Good Luck!

Until June, take your time, relax and enjoy.

HARRIER STRIKE MISSION

Fly Like a Jet and Hover Like a Helicopter

Review by Roger Abram

Approaching the island from the west, the Heads Up Display (H.U.D.) alerted me to an incoming S.A.M. As the missile drew closer, I pulled up and dropped a flare. No luck, I was flying too low and the flare splashed into the ocean! Time for maximum thrust and full throttle. As the Harrier gained altitude, I released another flare and got a glimpse of their missile as it whizzed beneath my feet going hungrily after its new target.

The western tip of the island was now below me and I adjusted thrust and throttle to attain a hovering position between the tank barracks and the airstrip. They had just launched another jet and I knew I wouldn't have time to shoot it down with the Aden Cannon, so a Sidewinder admirably performed its duty.

From my hovering position I fired the cannon at a tank that was rolling eastward. Then I levelled the barracks and banked the Harrier around to see another plane rolling down the runway. This time the bursts from the cannon brought their jet down and I knew it wouldn't be long until the last three planes were brought into action. Time is money, so the hangar was destroyed before they could get the planes out. Except for blowing up the fuel depot, the flight back to the aircraft carrier was uneventful.

Harrier Strike Mission, by Miles Computing, places you in control of the Harrier Jump Jet, a sophisticated aircraft with the ability to soar at Mach 1 and V/STOL (Vertical/Short Takeoff and Landing) capabilities. It's this new option of being able to fly like a jet and then hover like a helicopter which adds a new dimension to the more traditional flight simulators available for Atari computers.

The premise of the program is simple: take off from the deck of the aircraft carrier, fly towards the island, and then attack the tanks, planes, and buildings of the enemy. A successful mission is achieved by performing all of the above (without being shot down) and then either returning to the ship or landing on the island. Scoring is based on the number of aircraft and tanks destroyed, how many missiles you've evaded, and whether or not the headquarters, fuel depot, and tank barracks were taken out of commission. Rather than destroying the barracks and headquarters before all tanks and planes have been deployed, you'll score more points if you pick them off one at a time.

Your weapons in the simulation are your jet and its maneuvering abilities, the 30mm Aden Cannon, and three Sidewinder missiles perched on the undercarriage of your Harrier. The instrument panel updates you on air speed, direction, altitude, attitude, fuel, number of flares and missiles remaining, thrust, and throttle. Also shown is your current score, view selected (forward, right, left, aft, and top), and control stick position.

There are two main levels of difficulty in *Harrier Strike Mission* -- novice and expert. Under novice, control of the jet is simplified by having auto-coordinated flight. Also, enemy aircraft fly from slow to medium speed. You can select the practice option under the novice mode so that your aircraft continues to fly even after being shot down. It is in the novice mode where you learn the fundamentals of the game and begin to acquire some of the skills necessary to successfully pilot your Harrier.

Under expert mode, you don't have control of the rudder. It's here where you can perform barrel rolls and other acrobatic maneuvers. The enemy planes will be hot on your tail in this mode; each replacement plane the enemy launches starts out at a higher speed than the one before.

There are other variables you can control: the mission can be flown in either the day or night, the frame-rate processing speed can be adjusted by turning off the color shading and artificial horizon, and you can allocate unlimited fuel to ease your worry of sputtering into the ocean on your return to the carrier. If you're not in the mood for fighting off the enemy in order to just go for a ride, the "Peacetime" option allows for an unfettered cruise. However, if you do want to test your combat abilities to their limit, you can select the rate of speed for the enemy aircraft from slow to quadruple.

My major complaint with the program is the graphics. After touring the San Francisco Bay area in *Flight Simulator II* and seeing the Golden Gate Bridge, Alcatraz, and the control tower at the Livermore airport, the graphics in Harrier seem definitely second rate. Another drawback to the game is that since the basic premise never changes, there is no mystery in the game scenario. Your "world" in the program is so limited that if you fly west off of the island you'll soon find yourself approaching the island off of the east coast! Barring these minor distractions, the program has enough action to keep you glued to your seat and coming back for more.

The program is available from Miles Computing, Inc., 7741 Alabama Avenue, Suite 2, Canoga Park, CA, 91304, (818) 341-1411. The list price is $49.95.

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ULTIMA AND PHANTASIE
The World Beyond

Review by Robert Millard

The sixteen-bit wave has expanded the possibilities for every kind of user, from spreadsheet wizards to the would-be enchanters, spellbound by fantasy role-playing games. The latter have often had to settle for mundane graphics, much of the code pumped into their eight-bit machines use on statistics. But it is indeed graphics that prove to be the major triumph in the first two worthwhile fantasy role-playing conversions for the ST, *ULTIMA III* by Origin Systems and *PHANTASIE* by Strategic Simulations, Inc. For sage advice on exploring these well-travelled but nicely enhanced worlds, as the catch phrase goes — read on, brave adventurer.

•Those who developed "port apprehension" after seeing the ST version of an earlier Ultima (not from Origin) will relax the moment their party sets foot in either *ULTIMA III's* Sosaria or *PHANTASIE's* Gelnor. Forests, grasslands, mountains, roads, and waterways are well drawn and colored, and represent a major improvement over the symbolic terrain often seen in eight-bit programs. The island of Gelnor takes up sixteen screens and is a little larger than Sosaria, but while the latter is a scrolling country, each Gelnorian screen is loaded one at a time, like an illustrated text adventure. A little realism is lost, but to compensate, Gelnor is slightly more picturesque than the domain over which Lord British rules.

FIRST MONSTER ENCOUNTER

Both games are mouse-driven, but while *ULTIMA III* is faithful to the original game interface, *PHANTASIE* fully exploits the GEM environment. All actions are handled with drop-down menus, dialog boxes (many dialog boxes), and alert messages. Logical Design Works, the company that converted SSI's best selling RPG, obviously aimed for more than a good translation. With command options out of the way until clicked on, combat and geographical displays are full screen. *ULTIMA III* uses omnipresent boxes for primary character statistics, so the graphic action at hand is a little bigger than half display. Both programs offer keyboard or mouse for travel within their respective lands, but other actions are keyboard-friendly only in *ULTIMA III*; in *PHANTASIE*, the mouse is the best way to go.

Your questing characters are represented by a single icon during travel, and so will not be seen until the first monster encounter. At that time the combat screen appears and the individual characters are finally viewed, faced off against their adversaries. The most impressive improvement in either game immediately becomes apparent. Those drab, skeletal adventurers of eight-bit yore have been transformed by a renaissance of color and detail. Both programs exhibit good art work, but again it is *PHANTASIE*, with its greater diversity of races and adversaries, that goes further with the ST's capabilities. The six resplendent heroes of Gelnor are over twice the height of *ULTIMA III's* four party members, and monsters, represented no larger than humans in Lord British's program, sometimes dwarf the characters in *PHANTASIE*. This is the strength of SSI's game, the weakness in Origin's. There are eighty kinds of adversaries in Gelnor, which gives the feeling that, even as game's end is near, one has not seen everything that breathes on this strange island. Only twelve types of adversaries are encountered roaming Sosaria, and in comparatively short time, all will appear.

PATIENCE

Towns and dungeons are handled quite differently in each game. Upon booting up, *PHANTASIE* displays a colorful town, impressively drawn in perspective. But that same, single screen is used to represent all eleven towns..No need to explore here; simply click on one of the five buildings, conduct your business through dialog boxes, and be off. A bank, armory, inn, and guild (for raising character levels and learning spells) are included. In *ULTIMA III*, the nine towns and two castles are scrolling, overhead venues your party icon must explore, each of them unique. Much of the same kind of business is transacted here as in *PHANTASIE*, but it is displayed graphically. There are also many discoveries to be made that will require several visits. In fairness, there are towns to explore in *PHANTASIE* as well, but designer Doug Wood classes them as "dungeons." The ten single-level "dungeons" in SSI's game may be a city, a castle, a temple, a cave, or even a traditional dungeon. All are represented by a simple, overhead maze that reveals itself as you explore, and can be saved, eliminating map-making! (One caveat: each save overwrites the previous one, so one may want to complete one dungeon before exploring another.) The dungeons are the meat of the game, containing all the items needed to win, and the best puzzles. In contrast, *ULTIMA III's* six dungeons are all true, subterranean environs, eight levels deep. The overhead view is replaced by primitive perspective graphics, except in combat. Saves aren't possible here, and mapping is required, but a certain 'precious' commodity will aid frustrated cartographers. Life in the dungeons is tough until the Stygian Abyss is discovered and mastered, so patience is as important a shibboleth as any incantation. Neither program boasts impressive dungeon graphics.

Having read this far, one might infer that *PHANTASIE* is the superior of the two games. It is the more ambitious conversion, but as to each game's worth per se, some individual focus is appropriate, beginning with Lord British's saga. By the time Ultima the Third ascended to RPG supremacy in 1984, Richard Garriott had infused superb "feel" into his game system. *ULTIMA III* offers castles, cities, dungeons, puzzles, spells, and

monster battle, but it also includes simple tactical movement in a kind of real-time combat, ship travel and combat, one-line conversations with townspeople, a sublime system for raising characters' attributes, and a continuous musical score. Kenneth Arnold, the computerized bard who composed the ten original themes in *ULTIMA III*, offers some interesting chord progressions and evocative melody lines, but more importantly, each piece fits the mood of the situation wherein it plays. The battle chords are urgent, the dungeon theme eerie and spacious, and the town music tranquil. The party is heralded with a majestic theme entering Lord British's castle, and forewarned of the final encounter with a piece that is sinister and fugue-like. Although the music plays more smoothly through sixteen bits, overall the original tones of the eight-bit version are simply not achieved. The vote here is for a better treatment on *ULTIMA IV* for the ST, promised no later than June. Otherwise Bob Hardy's conversion is successful, and bodes well for future ST releases in the Ultima chronicles. As with all versions, a cloth map and elaborate documentation written in a lucid 'Olde English' are included as an enticing prelude to the Ultima experience.

THE DARK LORD

PHANTASIE for the ST is such an excellent enhancement of a popular game that one hesitates to quibble over a few weak points. Yet, this writer feels that travel in Gelnor too quickly becomes a superfluous affair, especially when one learns the spell to transport from town to town. All the action occurs in the dungeons, but too much is revealed with text windows instead of graphics. A designer deserves the right to his own approach, but a graphic representation of some novel events in the game would heighten the feel fantasy gamers prize. (Ardent fans of the Enchanter Trilogy may disagree.) Also, *PHANTASIE's* ending is unsatisfying: defeating the Dark Lord wins the game, but the player is not informed of this and the program continues to run. (For those who've already played *PHANTASIE*, the Dark Lord is only a minion of Nikademus. Though he is referred to as the central villain in the game, Nikademus never appears.) A lesser criticism is the lack of distance weapons in combat. Still, ST fantasy enthusiasts will want this game for the character and monster graphics alone. Some nifty puzzles, especially that confounded Dosnebian Temple entrance, contribute to an enjoyable adventure.

Both of these games have corrected some weak points in their most recent incarnations. *ULTIMA IV* includes 44 monsters; distance weapons are included in *PHANTASIE II* (rocks) and *PHANTASIE III* (bows). All three are or will be available for the ST. Also forthcoming for the ST are *WIZARD'S CROWN*, *RINGS OF ZILFIN*, *BARD'S TALE*, and (Gadzooks!) *Wizardry*. Hmmm. Methinks the wizard Tramiel has cast a mighty spell upon the gameware publishers of the land.

ST BOOKS

Three Choices for the Beginner's ST Library

Review by Pamela Rice Frank

Although Atari now, unlike during the Warner years, supplies owner's manuals with their computers, many beginners find it helpful to have an alternate reference on hand. While the ST manual walks the new user through all the introductory steps of unpacking and hooking up the system, controlling the mouse, using the GEM desktop, disk drive usage, and the opening menu, most novices do benefit from having another resource offering expanded explanations. Oftentimes another author's wording of the same subject provides the perspective necessary to develop an understanding of the topic at hand, eliminating a great deal of trial-and-error to reach that plateau. For that reason, this month we'll take a look at three such beginner's-level ST books.

COMPUTE!'s First Book of the ATARI ST

COMPUTE! Publications, Inc., P.O. Box 5406, Greensboro, NC 27403. ISBN/0-87455-020-3, 328 pages. Book price: $16.95; disk price: $15.95

Like COMPUTE!'s series of books on the Atari 8-bits, much of the information in this book are reprinted articles from the magazine. If you've saved your 1986 issues, you already have:

Doodler (2/86)
Switchbox (3/86)
Adding System Power to ST Basic
  Part 1 (4/86)
  Part 2 (5/86)
Hickory, Dickory, Dock (5/86)
Custom Title Bars for ST BASIC (6/86)
ST Hints and Tips (6/86)
ST System Software, Inside Out (6/86)
Odd Facets of GEM (7/86)
GEM Quirks (9/86)
MODified Shapes for Atari ST (8/86)
Softball Statistics (8/86)
3-D Tic-Tac-Toe (9/86)
Home Financial Calculator (9/86)
Reversi (10/86)

This book contains a wealth of new material as well. Section 1, Getting Started, begins with the expected "Introduction to the ST." (This is their first ST book after all.) This chapter starts with an overview of the computer, briefly explaining the CPU, disk drives, GEM desktop. Also included are instructions in file copying, mouse dexterity, application installation. This section concludes by giving an explanation of a (previously) undocumented GEM usage of the RIGHT mouse button.

Section 2, Games, documents switchbox, reversi, and 3-D Tic-Tac-Toe, all three of which were previously mentioned above.

Section 3, Applications and Education, contains the BASIC source code for a multiple-choice test generator and a memory trainer.

Section 4, Programming, includes "ST BASIC Sorting Algorithms" which lists and explains 7 sorting routines, written as subroutines that can be added to your own programs. "File Handling in ST BASIC" is a tutorial on the two types of files accessable from BASIC -- sequential and random.

This chapter also has some hints on designing your own program so that it will spot and trap the errors most likely to occur in programs requiring a large amount of data entry, enabling the program to gracefully continue rather than rudely crashing. "Using GEMSYS and VIDSYS in ST BASIC" explains what the programmer can do to utilize these commands.

Section 5, Sound and Graphics, begins with the expected article on "ST Graphics." This section also contains "NEOchrome: The Rainbow Machine" which details the advanced color features of that program and ends with "Making Music on the ST." The latter article explains how the ST handles music and includes MELODYST, a music-generating program.

Section 6, C Programming, is a brief introduction to that language. A second chapter in this section deals with "Moving Objects in C."

Section 7, Pascal Programming, contains a "First Look at Pascal Programming" and "Event Management and Window in Pascal."

Appendices round out this book, explaining how to type in the programs included and hints on using the book.

Finally, this beginner's manual has the added advantage of being spiral bound. Those familiar with Compute! will recognize familiar authors -- Tom Halfhill, Bill Wilkinson, Sheldon Leemon, etc. I found this book to be a further example of why COMPUTE! BOOKS has earned the reputation of providing quality Atari assistance.

Presenting the ATARI ST, (Revised Edition)

A Data Becker book published by: Abacus Software, P.O. Box 7219, Grand Rapids, MI 49510, 616/241-5510

ISBN/0-916439-33-X, 179 pages, $16.95.

I have liked all the Abacus books I have read to date. This one is no exception; however, because the bulk of the book is devoted to a very elementary introduction to the ST, I would suggest taking a look at it before you make your purchase.

This books covers all the introductory topics mentioned in the previous book review -- working with GEM, etc. Additional information, not covered in the previous book, is provided on the software once bundled with the ST as well as a 15-page introduction to LOGO.

I personally found Chapter 4, Computer Languages, to be a well-written treatment of this subject. While brief, it does provide the novice with an overview of problem-oriented and interpretive languages without being condescending. (This overview consists of 8 pages -- brief and to the point.) The LOGO sections introduce procedures in LOGO, arithmetic and logical operators, controlling program execution, graphics commands, and primitives for word and list processing. This chapter ends with a one-page explanation of ST BASIC followed by a listing of ST BASIC commands.

By Abacus' own admission, this book is intended primarily for someone contemplating the purchase of an ST by providing "the reader with a summary of the capabilities and features of the fascinating new machine..." Information on the book's back cover further states (this book) "serves as a good source of information for the prospective buyer." I agree that this book would be the ideal gift for that friend who's considering entering the ST community.

Most of the material in this book has been covered in more depth elsewhere. While that may seem an unnecessary fact to point out, having just mentioned Abacus intends for Presenting the ATARI ST to simply provide a summary on the ST's features, chances are most novice users haven't yet had the exposure to or haven't yet begun to accumulate the publications in which much of this material has already been addressed. For that reason, once that prospective buyer becomes a proud ST owner, it's unlikely he'll abandon this book.

ATARI ST User's Handbook

Weber Systems, Inc., 8437 Mayfield Road, Chesterland, OH 44026
ISBN/0-9388-62-40-5, 159 pages, $9.95.

This is another book probably better suited for the person who doesn't yet own an ST. Chapter 1, Introduction to the ST, does have the added feature of an easy-to-understand comparison of the ST's icon environment and the text command world of MS-DOS.

Chapter 2 covers the set-up. While reading this chapter could provide reassurance to the total novice ("If I buy an ST, will I be able to figure out how to plug the thing in?"), it is basically a simplification of the ST owner's manual.

Additional chapters include "Using GEM," "GEM Desktop," "Introduction to LOGO," and "Data Communications."

This book also has one of those frustrating computer-generated indexes. For example, check out 'desktop' and you're presented 14 different page numbers to sort through to find the info you're looking for.

Unfortunately, this book still assumes the user will be using the obsolete 'TOS System Disk.' So, while the book is easy reading and the price is nice, it may create some unnecessary confusion. At $4.95 this book would be a bargain. At twice that -- well, you decide.

NEIL HARRIS IN DENVER (Continued from Page 15)

I have an ST and I was wondering why Atari released two different monitors rather then combining all resolutions into a single display model.?

That was a decision that was made very early in the development of the system, and looking back on it maybe we didn't do the right thing. But, it would have cost a lot more money to have put together a monitor that would have done both, probably as much or more then the two separate monitors do. So we opted to produce the two monitors and keep the price of the basic system down. In Europe people don't want the color monitor and 95% of the systems sold there are monochrome only. The number of people who want both displays are very small, most want either color or monochrome and don't want to spend the extra money to an 'all in one' monitor. (personal note; I disagree with Neil's statement, a lot of people I know would be willing to spend the extra to gain all three display modes in a single monitor. I know I would.

Can you give us a description of the new XE game system?

The XE is basically two separate boxes, the console box is about yea big (about 6X8") with a cartridge port on top and the option, start and select buttons placed in a row below it. There is a plug in (separate) keyboard that plugs into the front. Basically it's very non-threatening, especially without the keyboard. But then you can plug in the keyboard and do all the things a computer can do.

Why doesn't Atari come out with a system similar to the new Apple //GS. That is, a 16-bit version of the 6502 with more memory?

Basically I'm not a big fan of the Apple //GS. I don't know if you've seen one at work, but if you have than you'll understand why that is. In order to get it to do some of the graphics things it does and give you the good resolution they needed a higher horsepower chip than they were willing to put into it. Apple did with that machine much the same thing IBM did with the PC jr. They specifically limited parts of it to keep from competing with the unit next up in the line. Now the processor sounds pretty neat but there's no way it has the horsepower to to support the graphics resolution and other features that the system has. If you look at it performing, because you get such good resolution you get great still pictures, but the animation is just terrible. Anything moving around the screen, such as mouse pointers, is very jerky. Most people looking at that system aren't going to be too happy with the way it works. And for the price,,, if you get to a store that has both a GS and an ST side by side you'll see the same thing we see where there are STs and Amigas selling side by side. You'll see a lot of STs getting sold. I expect that schools who want better graphics, and tend not to be the most savvy computer buyers in the world, may get them because of it's compatibility with much of their old software. I don't really see it having a lot of impact, it's a great machine to get a lot of attention from the computer press but i don't think it's going to be a big factor. In considering what it would take to upgrade our 8-bits to better resolution and to do things like the GS, it would end up costing so much more than going with a 68000 machine that it just didn't make any sense to do it.

What is Atari's response to the new Amiga 2000?

Our response is to wait and see if people are really going to be willing to put their money where their mouth is on that machine. Realistically we're talking about a $1500 base machine with no monitor. Add a $500 monitor and then, to get all the great stuff that people keep writing about, you have to add all these extra cards and everything else. Now we're talking about something over $3500 to do what people say it will do. At that price you're talking about going head to head with machines like Apple's new open Mac which I think is a much better system. No, I don't see the Amiga 2000 as being a serious contender in the marketplace. The one I take more seriously is the new Amiga 500. I think that they have actually done the right thing and if it is distributed properly it may be the first time the Amiga really has an impact on the US market. Still, with a color monitor it will sell for as much or more than a color 1040ST. But it's not that much more so people will be able to sit them side by side and make a decision. But we're still pleased with the performance of the ST and we think that our engineers did such a good job that we will win that battle too.

Why doesn't the 130XE have a real parallel port? It would only make sense to have added one when redesigning the the machine.

A lot of things make sense but if you want to maintain compatibility then there are certain sacrifices that have to be made. I understand what you mean. But Atari's original designers, in their infinite wisdom, designed the 800 without a standard serial or parallel port and we have to maintain compatibility with the older systems. If we start making major changes like adding a parallel bus than other software and peripherals won't work with it. If you really want to use a centronics standard printer than I suggest you look at the XEP80 (of which we have only a nonfunctioning example, it didn't start that way but it quit when we got here) which is an 80 column display board costing $79.95 and should be shipping momentarily. It has a centronics parallel port built into it. The board will use any composite monitor but we recommend a monochrome unit because the adapter doesn't support color anyway. The unit plugs into a joystick port and is fully compatible with most of the software so long as it doesn't write directly to the screen. We're doing conversions of things such as Atariwriter+ to work with the 80 column display.

What is the current status of the ST's blitter chip?

My original understanding was that in November we got the final rev of the blitter chip and that it worked fine. But actually it took 6 more weeks of tests before we could be assured that everything was 100% with it. So the blitter chip, as of the middle of January, was approved for production. There is a three month production cycle on new chips and at that point we'll have them available. There will be an upgrade kit available for about $120 that will include the blitter and a new ROM set for the machine. This will maintain full compatibility with existing software because the blitter is now wired directly into the lowest level of the operating system. The OS already included a blit routine which was done in software which was slower than doing it in hardware. So we've just 'rewired' the routine to dump it to the chip. Where you'll notice a real difference is in the way the desktop works, things such as icons and windows will pop up instantly now rather than slowly appearing. Scrolling will now be much faster and smoother in all applications. So taking the three month chip lead time from mid January we should start seeing the upgrades available sometime in April.

Why isn't Atari doing more advertising???

The philosophy is that we had to have our act together and have distribution together before you have a high profile. If you go out on TV and do commercials and then have people say 'Great this sounds like a great product... Where do I buy it?' And they can't buy it then you've wasted a lot of money. The spring is where we will be spend a lot of effort, some of which you'll be hearing about very shortly when we launch a few of our efforts to get new distribution. On the heels of that you'll start seeing the kind of high profile you're asking about. We have a brand new add agency in New York with a lot of the people I used to work with back at Commodore. They are working on a whole commercial campaign on the 520 and 1040STs. If all goes well we should start seeing commercials around April or May. After that there'll not be too much in the summer and then a whole bombardment of them in the fall.

With the release of new Operating System ROMs for the Blitter has Atari fixed any of the 'Bugs' in TOS? How about the 40 folder limit on the drives?

They will fix some of the bugs, but the 40 folder limit bug wasn't addressed at the time those ROMs were completed. There will be a later ROM revision, hopefully late this year, that will address the remaining bugs that are still in the system. The guy who wrote GEM-DOS was one of DRI's most inexperienced programmers. In fact we think calling him a programmer is a little bit on the charitable side at times. He showed no evidence of knowing how to dynamically allocate memory, so what he did was create 'buffer areas' inside the system with fixed sizes of arbitrary limits. Since the ST was floppy based at the time of design he must have thought that a limit of 40 folders was fine. But now with a hard disk 40 folders isn't enough and terrible things start happening to you when you exceed his 40 folder limit. We are currently working to fix it and we already have a patch program 'in house' that, when put into an auto folder, will ask how many folders you want and allocate more memory for more folders. Hopefully we will get this out the door within the next month or so. It uses just a little memory but it's not the ideal solution, that would be for the system to take the memory as its' needed, this is what we're working on.

Why doesn't Atari have a toll free 800 number for users to call? What about using the one advertised in the adds?

That 800 number is to find out where the local Atari ST dealers are located, if asked for anything else the operator has to refer the caller to one of our non-800 phone numbers. Back at Commodore we tried the 800 service call system, the vast majority of calls dealt with 'how do I get out of the hollow tree in this game' type questions. By going back to a system to where the user has to pay for the call we started getting only serious questions that we could work with. Actually we now have people who can really help out with these technical type questions. Used to be our tech folks could only tell callers where to get their units fixed or what kind of box it came in. They just didn't have the time to really help. Now we have new people that can take the time and answer questions in detail, in fact some of them are here with us at the show. As time goes by we'll be increasing that support, including 'on line' support. We've gone 'on line' a lot on GEnie lately, and it's proven very productive.

Why did Atari change to a different RGB monitor? The new unit I've seen is nowhere near as good as the original unit.

The current dollar-yen rate is such that the original (JVC) unit would cost us more than we could sell it for here in the States. Now, there was not meant to be any difference between the old unit and the new one (from Gold Star), we specified that the video output was to be identical. Unfortunately the Quality Control at Gold Star let more than a few slip out mis-aligned when the production run first started. We have been working very closely with them to fix this problem and have our representatives inspecting the machines before they leave the factory. The problem is not that we've downgraded the monitor, it's that the new supplier didn't have the QC that we were used to from JVC. There is nothing wrong with the CRT or the electronics, functionally they are identical to the original unit. The problem is one of mis-alignment. As the new batches of monitors come out we will see fewer and fewer cases where the alignment is not up to 'spects. Our service department is putting the finishing touches on a kit so

our dealers can put the older monitors into adjustment. I've seen the results of a realignment on one of these early Gold Star units, and they are impressive. [Personal note, I've seen both outstanding and poor video from the Gold Star monitors. I can believe that the problem is one of alignment rather than some major hardware defect and am waiting to see this new 'service kit'.]

When will we be seeing the new TT? (Thirty Two bit CPU computer)

Hopefully we'll start talking about it at the Comdex in November. We've got so many projects going on right now that it's hard to predict exactly when things are going to happen. If things go well with the PC then we'll have more resources to devote to the TT and to other projects.

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How much longer before we see a usable GDOS?????

When I spoke to Leonard Tramiel he said that GDOS is done and is released. GDOS is already being used in some products, look at *DEGAS ELITE* and *EASY DRAW II*. Even *MICROSOFT WRITE* is being developed to use and take advantage of GDOS. Now I hear rumblings that there are some problems with GDOS, as we hear those we take them back to Leonard to do something about them. At this point I don't think he's convinced that there are problems with it, he feels that the documentation isn't quite good enough to teach our developers how to use it properly. GDOS, by the way, should never appear on the store shelf by itself. It will only be found on the disk with the software that takes advantage of it.

How can Atari charge it's developers extra for GDOS? After all, it was supposed to be a vital part of the Operating System from the beginning.

I think that some of the developers made more of an issue out of that then it deserves because they misunderstood what the original arrangement was. I really can't comment on that arrangement in a public forum, but basically it is that there is a fee on a per developer (NOT per product) basis. It is very normal to have a fee where proprietary software is used as part of a software package, everybody does it.

Are there any Astrology programs available for the ST?

A good question, I know the XE has a few Astrology programs but I've not seen any for the ST. [Ed: *ASTROLOGY\HOROSCOPE MAKERG2-, Navarone Industries, 800-624-6545/*]

How many programs will be incompatible with the Blitter upgrade?

I haven't seen any yet, some programs like *STARGLIDER* will work exactly the same as without the blitter. This is because they bypass the system's blit routine and access the system's hardware directly to gain speed. Actually its' very hard to come up with a program that won't work with the blitter. There are a few programs that base their timing on graphics speed rather than the system clock. This is the only type of program that may have problems with running too fast. The only one like that I've seen is a golf game where the club is swung so quickly that you can't see it or the ball move. We told everyone not to assume anything. Don't base your timing on graphics speed because we knew we were going to improve that, and don't write resolution dependant programs because there is going to be a higher resolution machine at some point. Unfortunately not everyone listened to us and they wrote some self-limiting software. It's unfortunate but it happens. We keep a large library of software that we test out with any upgrades or changes we make in our hardware or operating systems. This is how we learned that anything written in *PERSONAL PASCAL* doesn't work with GDOS. We talked to the people at OSS and found that they had just discovered it too. There was a bug in their compiler where two lines were reversed, they called a variable before initializing it, and a patch is already in the works.

How much longer before we can get the new Atari 1200 baud modem?

I have one <big grin>, it's on my desk at the office. The unit should be available within the next month or so, we should have the first shipments by the end of March and have them in quantity in April.

Will Atari have as big a show at CES as we did last year?

Yes, at the June CES we had a very large booth right next to the Commodore booth so we could throw things at each other <big laugh>. It doesn't look as though we will be at Comdex this year, this is because it's being held at almost the exact same time as CES and we had to make a choice. Since we won't be at Comdex we've had to make other plans on reaching the computer dealer.

Is there a release date for the new 3 1/2" drive for the XE?

At this point there is no release date. This project has been on and off again so many times.... Right now I think it is off again. We have a LOT of 5 1/4" drives still in stock and we are still going forward with a new DOS that will support higher density drives as they come along, one of which OSS is doing for us. This way, if we do decide to go with a 3 1/2 drive the DOS will be ready. Frankly, I don't think it makes a lot of sense to do that product since all the software is in 5 1/4 format. I just don't think the need or the support is out there for such a drive.

What type of system do you use for the graphics in the new PCs?

We use a custom graphics chip that supports four of the most common and popular IBM graphics systems. These include Monochrome, Color Graphics Adapter, Enhanced Color Adapter and the Hercules Graphics Board. We have designed the operating system so that it samples the type of graphics resolution the software is looking for and sets the needed display on automatically. By including these graphics modes standard we make the PC actually more compatible than most of the other clones because you don't have to spend more money to upgrade to better color graphics. So for the only program I've seen that wouldn't run on it is IBM's PC Basic which needs to see IBM's ROMS to work.

What will the PC cost?

We are looking at a retail price of $699 with one drive and a monitor.

I have a 520ST and I'd like to upgrade it to 1 Meg, do you have any recommendations as how I should do it?

Your best bet is to go with one of the current 3rd party upgrades. Atari officially does not support upgrades, our service department doesn't like them because they cause problems if an upgraded unit is sent in for service. But there are companies out there making 1 Meg upgrades that are on a single card that you just plug in to a chip socket. The hardest way is to get 1 Meg ram chips and try and solder them in on the board yourself. This is very difficult and there are many areas where you can ruin the PC board. I suggest talking to some of the dealers here at the show for suggestions and help.

What kind of luck are you having courting the big software houses like Microsoft, Lotus and so on?

Well, Microsoft is already working with us to get *WRITE* finished and out. They had wanted to do the operating system for us in the beginning, with Windows rather than GEM. We said "Great! How long will it take?" The answer was "Oh, about two years." At that point we said that we would be out of business by then and went with GEM. They weren't too happy with us for that but since then they have come around a bit and realized that we didn't have much choice then. Write is pretty far along but is taking much longer than expected, which is about par for the course for a Microsoft product. If *WRITE* sells well, then that will be the evidence Microsoft is looking for to provide further support for the ST. We've had people from Borland in over the past few weeks, talking about things like *SIDEKICK* and *TURBO PASCAL*, all things we'd like to see very much. Ashton Tate has been a little sticky, but since we have things like *DBASE* we're not really that concerned about it. Lotus is another one that we talked to in the early days but not much since. Again though we have things like *VIP PROFESSIONAL* so we're not overly concerned about them.

How long before you come out with an 8 Bit emulator so people with STs can keep their sizable investment in their XE systems and use them with their new computers?

I may be accused of being flippant, but you can just go out and buy a 65XE and 1050 drive and run all the 8-bit software you want for a lot less then what an emulator would cost you. There is someone who is fooling around with a software emulator that emulates 8-bit basic but there is no way you can emulate the graphics chips in software, that has to be done in hardware. At that point you're talking about a board that will cost at least $100, and then you have to add the cost of a 5 1/4 drive to go with it.

Is Atari working with Aldus for it's desktop publishing system? [Note: Aldus is the creator of the Postscript language for laser printers, it made the Mac famous and the Mac returned the favor.]

I don't know, we've been talking to a lot of companies about desktop publishing. In fact there are two publishing programs being shown and sold here at the show. We're looking at other desktop publishing programs and will most likely licence one of our own for use with the laser printing system, but as far as I know Aldus isn't involved with us right now.

A question about the laser printer was asked here, but the tape didn't pick it up.....

I don't think there is a system where you can just buffer everything up and dump it to the laser to print while you do something else, there is a lot of information required even for a single page of laser type. We already have a 520 running a laser printer, it just took a few bits of code. One is a printer driver that treats the laser like a Diablo printer, the other goes in and replaces the screen dump system so that you can do a really nice high res dump to the laser. There are other things coming that will do even more.

Will Atari be releasing a Lap Top version of the XE or the ST????

No! At this point we have no intention of getting into the laptop market. That is a very small subset of the buying market and we are going after much bigger markets. Maybe in a few years, but not now.

Are you working on an ST emulator for the IBM?

Again, no. It would be very difficult to do an ST on a single board, and also very expensive. The video display would also create some major problems since it would have to use the same RGBI monitor as the IBM.

What happened to DRI's GEM WRITE/DRAW/Etc.....?

It's very hard to figure out what goes on in DRI. I think that DRI saw that the ST was going to be far more successful than their IBM product. They decided to hold

back on those products and to try and get back the rights to GEM from Atari. I don't know what the status is right now on the rest of the GEM/***** series for the ST.

Why did you dump the service requirements for the ST and XE on the dealers???? Isn't this a little unfair?

They never were totally responsible for the service, it was just possible to buy the machines at a better price if they took over the service. It was also possible for us to be responsible for the service. Going beyond this we are looking into ways of implementing national service programs. This is a very sensitive area since the old Atari has such a system set up and it had a great many false claims sent in against it. We are trying to avoid this pitfall and it's proving very tough.

What is the current price of the 520 mono system?

Right now there is a special going on and we've cut the wholesale price and a lot of the dealers have cut their margins for the sale. Realistically the price should be between $550 and $600.

What can you tell me about the problem Atari is having with the double-sided disk drives used in the 1040? I understand that there have been some major Quality Control failures with it, the drive in my 1040 has started to make noises and I was told by a tech here at the show that it won't last.

I'm not aware of any quality control problems on our disk drives. There were some problems with some of the very early 1040 drives because they were not properly grounded, a service notice was sent out and it's about a 5 second fix for your dealer's service center.

[Note: since this conversation, the fellow who asked that question was notified -- by the company he bought the 1040 from -- that Atari had recalled the DS drive in his unit and sent it back for repair:]

Will the new PC be expandable?

Not internally, there just isn't room for standard expansion cards. There is a full motherboard bus that is accessible from outside the unit. We will be releasing an expansion cage that will attach to that bus and allow 'add on boards' to be used. What we've done is develop two products, one is an expansion box with slots in it and the other is a box with a hard drive and slots. This way people can expand the machine if they really want to. But the way the unit comes out of the box it is already equipped with most of what everybody wants. It has Parallel, Serial, Mouse and Joystick ports, all the color boards built in and so on.

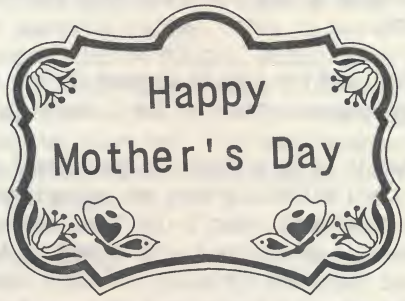
The Atari hard drive, will it ever be daisy chained for expansion?

Yes, in fact the new Winchester drive being released for the Mega line has two DMA ports built into it. I'm not sure if the current hard drives will be modified for chaining. In fact, I'm surprised that they weren't designed that way from the beginning. It was supposed to have it from the beginning. I don't know why it was changed.

When will the PC be available in numbers?

We are shooting for late summer, though there will be some available in early summer. Well folks, lets wrap it up and get on back to the show.....

And that's it folks, hope you enjoyed the show.



XM301 MODEM WARNING
An Electronic Time Bomb?

by Paul Alhart

If you own an Atari XM301 modem, you may own an electronic "time bomb." After a rash of hardware failures last month, which included smoking a disk drive and two printer interfaces, I found the cause of my problem to be my XM301. The modem worked fine, but was killing off my system piece by piece.

The reason has to do with the 13 wires coming from the serial I/O plug, although only nine wires are actually used by the modem. The other four wires have about 1/8 inch of bare wire showing, and are just hanging around, unterminated, waiting to touch something they shouldn't. I have checked other XM301 modems and this condition existed in them too.

Here is what to do IMMEDIATELY!

With the power OFF, remove the two screws from the back of the modem and lift off the plastic case. Inspect the wires where they enter the case. You will find four of the wires are not connected to anything. They will be cut off close to the other sheathing of the cable. If these four wires show any bare metal, cut it off. Be careful not to let the cut off pieces fall into the modem board.

Next, tape each wire individually, so that it cannot possibly touch any other wires or part of the modem. Put the modem back it its case, replace the screws and you're done.

I've written to Atari regarding this problem, but have not received a reply as yet.

[CN ed. note: The editor of the MAGIC newsletter reported finding two bare wires in his XM301 "close enough to touch" and feels they caused the death of his 850. So, beware! This condition may not be endemic to just a small number of units!)

[Reprinted from the newsletter of the Atari Federation.]

ATARI'S SMALL MIRACLES
An ML File Menu and an Action! Maze

by Mark A. Brown

Welcome back to Atari's Small Miracles, the wonder column of the 80's ("Gee, I wonder why I bothered to read that.") The column that is an almost endless source of programs needing to be debugged, subroutines no one will ever use, and "quickies" that generally just fill up disk space.

But not this month! This month I am rather proud of the two programs. There is no real theme to them; I am running short on time right now, so I just pulled out some of my older programs that didn't fit the column's length limit -- until now.

MLMENU

This first program is, unconditionally, the program I use more than all others combined. It is yet another file menu program in a market flooded by them, but I like to think this one is different. For one thing, it is in machine language. This means that it doesn't matter what language you are using, you still may use this menu. I have successfully used it with BASIC, Pilot, the Atari Assembler Editor, and Mac/65, and I imagine it works with many more. For another thing this means that it is FAST, and while this may not mean much to the usual menu, the speed of the sort in this one is especially convenient. Finally, this means that it may be kept in memory 100% of the time. No more checking to see if you have the right disk in the drive to load it, no more making millions of copies on every disk you own. Just boot it up as an AUTORUN.SYS file and it's there until you turn the computer off.

Another feature is its ease of use. To activate it, simply type DOS and hit return. A little vanity line will be displayed briefly while the menu is being read in and sorted, then a cursor is placed on the top left file. To choose your file, move the cursor around with the cursor keys. The top of the screen will display the command (RUN, LOAD, ENTER, or PURGE, chosen by pressing R, L, E, or P repectively), the separator (quotes, a space, or a "#" mark, chosen by pressing the appropriate key), and the file name. Press [RETURN] when you have the command, separator, and file you want. The screen will clear and the file will be loaded.

Note that the "Purge" command will have MlMenu delete a file off the disk, then re-run itself. This is useful for cleaning your disks of old files.

You can also press the "D" key to actually go to the DOS menu, since you used the DOS command to get to the menu, and the "Esc" key to exit, all programs you had in memory before you went to the menu still intact.

Anyway, type in the nightmare of hex numbers below and RUN the program. The data will be checked line by line for errors until it reaches the final checksum, when another check is done. If it all is correct, type in the filename "D1:AUTORUN.SYS" and let the program write the data to the file. Boot up that disk and you have MlMenu at your fingertips!

```
10 DIM A$(90),H$(23):H$="@ABCDEFGHI:::
:::::JKLMNO":? "%Data check, hold on":E
=0:FOR L=100 TO 32760 STEP 10:C=256
20 READ A$:FOR A=1 TO INT(LEN(A$)/2):G
OSUB 80:C=C+A*B:NEXT A:READ B:IF C<>B
THEN ? "Err, line ";L:? :LIST L:STOP
30 E=E-C:IF A=46 THEN ? CHR$(156);L;"
ok . . . ";:NEXT L
40 READ C:IF E<>C THEN ? "Overall chec
ksum not correct":? "Check lines and r
e-run":STOP
50 ? "All data correct":? "File to wri
te data to ?";:INPUT A$:TRAP 33333:OPE
N #1,8,0,A$:RESTORE
60 FOR L=100 TO 32760:READ A$,A:FOR A=
1 TO INT(LEN(A$)/2):GOSUB 80:PUT #1,B:
NEXT A:IF A=46 THEN TRAP 70:NEXT L
70 CLOSE #1:? "File done.  Enjoy it!":
END
80 B=(ASC(H$(ASC(A$(A*2))-47))-64)+16*
(ASC(H$(ASC(A$(A*2-1))-47))-64):RETURN

90 REM Type data lines CARFULLY!
100 DATA FFFF0020FB20A003B90A0099EB238
810F7A9018DAF238DC823D003203320A936850
AA920850BA915850CA92085,97599
110 DATA 0DA9008DE702A9248DE802606CED2
320EC22A027B9872391588810F8A21020FD22A
9069D4A03A9CFA023200523,102947
120 DATA A90085DAA9059D42039D4903A9D59
D4403A9239D4503A5DA202323A21020752 3ADD
823C920D007ADD923C946F0,116743
130 DATA 16A202A000BDD52338E92091D4E8C
8C00C90F2E6DAB0D220FD22A90085D92023 23A
5D485D6A5D585D7A5D920EA,155250
140 DATA 2085D8C5DAB05F20232 3A0FFC8C00
BB017B1D4D1D6F0F5B00FA00AB1D4AAB1D691D
48A91D68810F3A5D820EA20,157995
150 DATA 85D8C5DA90D7A5D920EA2085D9D0B
8AA1869032023 23A000B1D4D018C8C00B90F7F
C20F7218A20692318690 1C9,118579
160 DATA 039002A941AA2023238A60E8E8E88
A60A20FA026BDD52338E920915888CA10F4A90
085D9A016A90091588810FB,126334
170 DATA A200A000ADAF230A0A6DAF23A8B9B
023F0099DD523E8C8E00590F2ACC823B9C9239
DD523E8A000B9CF2338E920,137502
```

ACTMAZE

Last month I had a maze generating program in BASIC. A challenge was made to me: can it be done in *Action!* so it will be that much faster? Well, I've owned the cartridge for over two years now and have hardly used it, so I figured it would be good practice. So, here is an *Action!* version of a maze generator, somewhat faster than the Basic version. This could easily be the subroutine for something bigger -- a game, for instance -- since *Action!* is fast enough for such broad and complex programs. After compiling and running ACTMAZE, press the SELECT or OPTION keys to see another maze or the START key to end.

And that is all for this month, two long programs I hope will enrich your life, liven your parties, and profoundly affect your grandchildren. Or at least help you in programming and learning new techniques. If you have any good programs you would like to see here in this column, preferably (but not exclusively) under ten lines, send them to: Atari's Small Miracles, c/o Mark Brown, 7097 Game Lord Dr, Springfield, VA 22153. And I'll see you next month!

```
INT ARRAY DIR=[2 0 0 80],
  HALF=[1 0 0 40]
BYTE SCL=88,SCH=89,I,J,X1,
  CONSOL=53279,RANDOM=53770
BYTE POINTER A,B,SC

PROC MAZE()
  DIR(1)=-80
  DIR(2)=-2
  HALF(1)=-40
  HALF(2)=-1
  ;
  ; Set up a screen
  ;
  GRAPHICS(7+16)
  POKE(710,68)
  SC=SCL+256*SCH
  A=SC+41
  FOR I=1 TO 95
    DO
    FOR J=0 TO 36
      DO
      B=A+J
      B^=255
      OD
    A==+40
    OD
  A=SC+82
  A^=5
  ;
  ; Make a maze
  ;
  DO
  J=RANDOM&3
  X1=J
    DO
    B=A+DIR(J)
    IF B^=255 THEN
      B^=J
      A==+HALF(J)
      A^=0
      A=B
      EXIT
    ELSE
      J==+1
      IF J=4 THEN
        J=0
      FI
      IF J=X1 THEN
        J=A^
        A^=0
        IF J<4 THEN
          A==-DIR(J)
        ELSE
          RETURN
        FI
        EXIT
      FI
    FI
    OD
  OD
```

```
180 DATA 9DD523E8C8C00290F1A5D9202323A
000B1D4F0099DD523E8C8C00890F3A90E9DD52
3E8A008B1D4F0099DD523E8,147952
190 DATA C8C00B90F3A99B9DD523A200A001B
DD523C99BF00E297F91581869209DD523E8C8D
0EBA00AB1D4098091D48810,134506
200 DATA F7ADFC02C9FFF0F9293F8DFC02A21
0A9049D4A03A9EAA02320052 3A9079D4203A90
08DB6029D48039D49032075,92208
210 DATA 234820FD2268C99BD056ADAF23D00
FA9DBA023F821F32220102 3A9018DAF234C362
0A945A000D91A03F008C8C8,111628
220 DATA C8C02690F460B91B0385D4B91C038
5D5A9EF991B03A923991C0384D6A00FB1D499E
F238810F8A9CE8DF323A922,133731
230 DATA 8DF423A90085D94CEC22C91BD0034
CEC22C944D0036CEB23A003D9C423F0058810F
830058CAF23F00FA002D9CC,123495
240 DATA 23F0058810F830038CC8234 8A5D92
02323A00AB1D4297F91D48810F7A5D9206923A
868AAA5D9E02DD00738E903,127912
250 DATA 10333033E03DD009186903C5DA902
6B026E02BD00EC000F00538E901B0ED1869029
0E8E02AD010C002F0051869,114852
260 DATA 0190DB38E902B0D685D94C2821A4D
9B9D5233005A001E6D960A4D6A5D4991B03A5D
5991C03A99BA00160A26020,121777
270 DATA FD22A9009DF422EF234B03A986A02
34C0523A90C9D42034C7523201B23A9039D420
34C7523201B23A9219D4203,74018
280 DATA 4C75239D4403989D4503602069234
8A90085D5980A0A0A480A26D50A26D585D4681
865D485D49002E6D5680A0A,107070
290 DATA 4865D485D49002E6D5680A65D4900
2E6D518692A9002E6D51865 5885D4A55965D58
5D560A000C9039005E903C8,126616
300 DATA D0F760A510297F85108D0ED22056E
4100268686053002D6C2D656E750C006279002
D2200060021746172690773,69768
310 DATA 00336D616C6C002D697261636C657
3004030353227253235 2E00002C2F212400252
E34253250524C4540000203,48174
320 DATA 203233443A2A2E2A9B31323334353
6373839303132333435363738393031400000
00031F023FE233233343536,62223
330 DATA 3738393031323334353 6E202E3020
020,9122
340 DATA -2618001
```

```
; The program to run it all
;
PROC PROGRAM()
  DO
  MAZE()
  DO
    IF CONSOL=6 THEN
      GRAPHICS(0)
      RETURN
    ELSEIF CONSOL<>7 THEN
      EXIT
    FI
  OD
  OD
```

DOUBLE DENSITY FOR ATARIWRITER PLUS

Getting Around DOS 2.5

by Jim Gross

My initial reaction to *Atariwriter Plus* was probably the same as that of most other users of the "Old" Atariwriter. Atari seemed to have fixed most of the shortcomings we had complained about in the earlier program. For example, use of two drives, true double-column printing, insert/overtype toggle, mailmerge and on and on. Great! We now had an easy to use, inexpen- sive word processor that stood up very well to the "Big Boys" without requiring a PhD in Word Processing to use.

Our delight quickly turned to dismay, however, when it was discovered that the copy-protected disk included a version of the dreaded DOS 2.5. To many of us that meant no true double density, write verify could not be turned off, a sector-skewed copy could not be made for use with the high speed drives (1050/U.S. Doubler, Indus Synchromesh, etc.) and, horror of horror, the FORMAT command resulted in the pesky DOS 2.5 enhanced density. And, of course, we could no longer use a "Pet" DOS of our own choosing. The variety of DOS versions and custom variations available has long been one of the delights of working with the Atari.

Not to be easily defeated, I set about investigating this strange new Atariwriter-on-a-disk. A request for a Directory of the program disk from the *Atariwriter Plus* menu resulted only in a return to the menu. No luck there. If you boot DOS from another disk, however, and then check the program disk directory, Viola! A real disk directory, complete with the familiar DOS.SYS, and AUTORUN.SYS loader and the program itself, AP.OBJ. Other programs on the disk include the Mailmerge, Proof Reader and Printer Driver Editor utilities. Further experimentation reveals that none of the files are copy-protected! That's right, all the files are fully copyable using the normal DOS COPY file function. It appears that there is a bad sector on the disk which prevents the disk from being copied from the DUPLICATE DISK function, but it is not part of any file. The bad sector (sector 72, I believe) is only checked after the program is loaded and before execution. This means that, although the AP.OBJ files can be copied and loaded, it will not execute without the bad sector.

So what, you say? So this means that a copy of *Atariwriter Plus* in any format can be loaded and executed by any DOS as long as the original program disk with the bad sector is in drive 1. Theoretically at least, you should be able to write a new DOS file to the original program disk, but this would be extremely risky at best, and there is a better, or at least a safer, way.

With this newly acquired knowledge I used the following technique to run *Atariwriter Plus* in double-density with DOS XL and Indus Synchromesh (skewed-sector format). It should work equally well with SpartaDos and the U.S. Doubler Ultra Speed mode.

1. Boot DOS XL and engage Synchromesh.

2. Make a copy of the AP.OBJ file from the master *Atariwriter Plus* program disk in double-density, sector skewed format.

3. Place the copy disk in DRIVE 2.

4. Place your *Atariwriter Plus* Master Disk in DRIVE 1.

5. Use DOS to binary load AP.OBJ from DRIVE 2.

Atariwriter Plus will load, read the bad sector from D:1 and execute. From here on, you're in business! A little cumbersome, but effective! I've used this method with the Indus high-speed mode (Synchromesh) and double-density for some time now and it always works, with ONE EXCEPTION. It will not EXECUTE with an ICD PR: Connection plugged in! It WILL work if you unplug the PRC until after *Atariwriter Plus* is loaded and running. Then you can plug it back in and all is well. I haven't figured this problem out completely, but it seems to be associated with the loading of the built-in RS232 device handler. That's right! *Atariwriter Plus* will also print to the serial port, usually meaning a modem. Anyway, the execution aborts using this method if Synchromesh is engaged and the PRC is connected. I'm not sure if this is also the case with the 850 interface, but I suspect it is. A minor inconvenience which could probably be solved with a little more effort.

Thanks Atari! The copy-protection serves its purpose and we can still have a little flexibility. I still don't like having to handle my original disk, but I suppose as long as Pirates abound, this is as good a compromise as we can hope for. Incidentally, I paid less than $20.00 mail-order for my copy of *Atariwriter Plus*. That includes two disks with mailmerge and spelling checker and a very well written owner's manual. At that price, why would anyone want to steal it? If you don't have *Atariwriter Plus*, buy it! Let's support software publishers when they do something right, and we will continue to enjoy this kind of "Power Without the Price".

[Reprinted from the DEC86 edition of Huntsville Atari Users Group newsletter.]

XLENT SOFTWARE'S PRINTWARE SERIES
An Undocumented Feature

by Jack Holtzhauer

You've all heard of "Murphy's Law" haven't you? You know, the old saw that If anything CAN go wrong, it WILL, or whatever. But few of you have probably run across Holtzhauer's First Theorem of Utter Futility -- "If it's never happened to anyone else and you wouldn't want it to happen to you, it will!" This is closely related to Holtzhauer's Second Theorem of Utter Futility -- "The worst case scenario is a certainty!" The following stands as a proof of either theorem.

I'm an 8-bit user. My system consists of a 130XE, an Indus drive, a Happy enhanced 1050 drive and a bunch of associated gadgets. The 1050 is my primary (boot) drive. I do lots of work with Xlent Software's printware series, especially *TYPESETTER*.

One day a couple of weeks ago I found it necessary to make several small changes to a flyer I was producing for a friend. I slapped my data disk in drive two, and booted the *TYPESETTER* system disk in my 1050. It wouldn't load. Hmmm! What now? I had just used it the day before.

I pulled out a disk utility and took a look at my system disk. Couldn't find anything wrong. All the files traced properly, etc.

I tried to boot a number of other applications programs. All loaded without fail until I tried a second Xlent product -- *RUBBER STAMP*. It wouldn't boot. A ha! Now I was getting somewhere! Out came *PAGE DESIGNER*, a third Xlent issue. It also failed to boot! The answer was obvious. My system had developed an allergy, or an immunity, to all Xlent Software programs.

Then it dawned on me. All three of these programs required that BASIC be disabled. My OPTION key was probably malfunctioning. The 130XE is notorious for problems with its function keys.

I booted up the 130's self-test module and ran a keyboard test. The OPTION key tested perfectly. I booted up SYNCALC. The OPTION key performed flawlessly. What now?

Well, let's change drives and use the Indus as my boot unit. I did. All three Xlent disks booted properly. It was now really obvious. My 1050 was at fault.

A call to my favorite computer retailer came next. He suggested my drive probably needed alignment. Why not have it checked out? I did. It checked out fine. But just to demonstrate my problem I had brought along my *TYPESETTER* system disk. We hooked my 1050 up to his 130XE and slipped in the *TYPESETTER* disk.

It booted, not once but twenty-seven times in a row. He then suggested the problem might lie with my computer, but I explained that the disk booted fine with my Indus drive, so the computer couldn't possibly be at fault. He suggested only one other possibility. I had probably gotten a bad load of whatever I had been smoking. Swell! Now this guy's doubting my sanity. Couldn't really blame him though 'cause that made two of us.

Back home I re-installed my 1050 and booted my *TYPESETTER* disk ready to finally get my project completed. You guessed it! It wouldn't boot!

I packed up my computer, power packs, both drives and all connecting cables and returned to the computer guru's den. We started with his system, substituting my computer, power packs, cables and drives piece by piece. Each time the *TYPESETTER* disk booted flawlessly until we added the Indus drive as the second unit in the system and then -- zounds! The disk finally failed to boot. Try as we might, we couldn't get the disk to load with the Indus powered-up as drive two. We then kept the Indus in the link, but switched it off. The disk booted.

What was my computer expert's explanation for this glitch? He had a very reasonable answer. At least I think it was reasonable 'cause the only part I partially comprehended was that there was "probably a leakage to ground" at the Indus' I/O ports. Who would have thought there was any liquid inside a disk drive in the first place. When I asked him why the problem only cropped up with Xlent Software products, his reply was more rational. "who knows," he said, "It's probably just an undocumented feature!".

Well, my problem's now solved. I still use *TYPESETTER* in a two-drive configuration, I just don't turn on my Indus until the program has been loaded.

What does all this mean? Simple. If you have a set-up similar to mine and you suspect your Indus drive is leaking something to ground at the I/O ports, don't call a plumber. Buy one of Xlent Software's printware programs. You won't find a better diagnostic tool at five times the price.

A SAMPLE PASCAL PROGRAM

by Alan Friedman PRFILE

Here is a neat little proram written in *Kyan Pascal* that reads text files and formats them into pages of 60 lines and then skips to the top of the next page, prints a page number and then starts printing again. One other great feature of this program is if the text is 40 columns, you can instruct the program to print two 40-column lines before issuing a line feed. This really cleans up 40-column text from disk documentation or from downloaded files.

The program is written as four separate procedures that are called from the body of the program as needed. As you can see, the body of the program is only eight lines long located at the end of the listing.

The procedure NewPage is a good utility that can be saved as a text file and used in other programs when proper page formatting is needed.

In procedures Convert and NoConvert, a standard Pascal format of check for end of file, check for end of line, read a character and then write a character is used. Also notice that following the END; forthe WHILE NOT EOLN(InFile), there is a ReadLn(InFile) and then a WriteLn(Printer) statement. This is where the line being read is cleared out and the carriage return is issued to the printer. This is a good routine to remember for use in other programs that require text processing.

```
PROGRAM PrFile(Input,Output);
(*This program converts 40 columnn*)
(*files to 80 column output to printer*)

TYPE
  String15=ARRAY[1..15] OF CHAR;
VAR
  Filename:STRING15;
  Ch:CHAR;
  LineCount,PageNumber:INTEGER;
  InFile,Printer:TEXT;
  Answer:CHAR;

PROCEDURE NewPage;
VAR
  I:INTEGER;
BEGIN
  For I:=1 TO 3 DO
   WriteIn(PRINTER);
   WriteIn(Printer,' ':38,'-',PAGENUMBER,'-');
   WriteIn(Printer);
   WriteIn(Printer);
PAGENUMBER:=PAGENUMBER+1;
LineCount:=0;
END;(*Procedure NewPage*)

PROCEDURE Initialize;
BEGIN
 WriteIn('Place disk with file on it in Drive #1');
 WriteIn;
 WriteIn;
 Write('Enter the name of the file to');
 WriteIn('be printed.');
 ReadIn(FileName);
 WriteIn;
 WriteIn;
 WriteIn('Is this a 40 column file? (Y/N)');
 ReadIn(Answer);
END;

PROCEDURE Convert;
BEGIN
 LineCount:=0;
 PageNumber:=2;
 Reset(InFile,FileName);
  WHILE NOT EOF(InFile) DO
   BEGIN
    WHILE NOT EOLN(InFile) DO
     BEGIN
      Read(InFile,Ch);
      Write(Printer,Ch);
     END;
    READLN(INFILE);
    LineCount:=LineCOunt +1;
    IF LineCount MOD 2 =0 THEN
     WriteIn(Printer)
    ELSE
     Write(Printer,' ');
    IF LineCount=120 THEN
     NewPage;
   END;
END;(*Procedure Convert*)

PROCEDURE NoConvert;
BEGIN
  PageNumber:=2;
  LineCount:=0;
  Reset(InFile,FileName);
  WHILE NOT EOF(InFile) DO
   BEGIN
    WHILE NOT EOLN (InFile) DO
     BEGIN
      Read(InFile,Ch);
      Write(Printer,Ch);
     END;
      LineCount:=LineCount+1;
      WriteIn(Printer);
      ReadIn(Infile);
      IF LineCount=60 THEN
       NewPage;
  END;
END;
```

(Continued on Page 57)

DOTS PERFECT PLUS A MAGIC APPLE
Up-Grade Your Old Epson Printer to NLQ

by Steve Golden

For many thousands of you who purchased an Epson FX-80 printer and now wish it had a new NLQ (near letter quality) mode, there is a product on the market you should know about. It's called *DOTS PERFECT* by Dresselhaus Computer Products, 837 East Alosta Avenue, Glendora, CA 91740. Phone (818) 914-5831. (CN Ed. Note: toll free number - 800/368-7737.) *DOTS PERFECT* sells for $79.95. *DOTS PERFECT* is a set of replacement chips for the Epson FX-80, FX-100 or JX-80 printers with versions also available for the MX-80 and RX-80 series. Contact Dresselhaus Computer Products for the specific features of the MX-80 and RX-80 versions.

My first impression is the packaging is very professional and appears to be a qualify product. The packaging, in this case, tells the truth. *DOTS PERFECT* is an excellent value. The owner's manual gives clear and concise installation instructions, including photos of the various configurations you may find inside your printer. I find the photos more accurate and helpful than drawings. The complete installation took me twenty minutes. No soldering is needed and no special tools are required. *DOTS PERFECT* has a one year warranty and the manual says "Epson America has determined that proper installation of *DOTS PERFECT* ... will not void the printer warranty." This in itself gives me confidence in the product. *DOTS PERFECT* adds NLQ mode and lets you change fonts by using the ON-LINE, FF and LF buttons as well as allowing standard software control. I've seen NLQ printing from software upgrades and from some hardware upgrades and I was not impressed. They usually looked darker than normal but sort of jagged, or just dark and thick. I found I could have better looking print by using bold or double strike modes. This was before I saw the output of *DOTS PERFECT*. I was surprised and very impressed when the NLQ looked more like Letter-Quality than Near-Letter-Quality! The print looks like it was done on a typewriter using a fabric ribbon. Sure, you can tell it's dot matrix on close examination, but it's the best NLQ I've seen on any nine pin dot matrix printer.

A big plus is the font control. You can set/reset the font without programming whenever the printer in on-line. The options give you condensed, elite, proportional, double-wide, emphasized, italics, underline, fine print, 8 lines per inch, plus quite mode, slash zero, perf-skip and margin control. If you have the JX-80, you can also select your colors. All this from the three control buttons on the printer. There is a beep from each setting so you always get positive indication your selections have taken effect. With *DOTS PERFECT* you don't have to write a program to initialize the printer for each font change not supported by your word processor. For example, users of *Bank Street Writer* on the 8-bit Ataris can print letters in draft until ready for a final copy. Then just press FF and print again, this time in NLQ mode.

If this were all *DOTS PERFECT* could do, it would be a great bargain, but there's more. You've heard of Magic Sac, the ST upgrade to the Macintosh, produced by Data Pacific. One problem with emulating a Mac is the Mac expects to be printing to an Imagewriter and puts out Imagewriter control codes. Surprise of surprises! *DOTS PERFECT* redefines the function of several of the DIP switches inside the printer and the manual clearly explains the new functions and how to set them. One of the DIP switches now switches from Epson mode to IBM or Apple mode. Flip the switch and your Epson accepts Imagewriter control codes. I've tested *DOTS PERFECT* using *MacWrite* and printing numerous fonts such as bold, underline, italic, subscript and superscript as well as the more exotic outline, shadow and Cairo fonts. I also did some graphic dumps out of *MacDraw* and everything worked without a hitch.

Do you want NLQ on your Epson? Do you want to change fonts at the touch of a button? Do you want to emulate an Imagewriter? Any one of these reasons make *DOTS PERFECT* worthwhile and you get them all. Get *DOTS PERFECT*! My compliments to Dan Dresselhaus, the inventor of *DOTS PERFECT*. Thank you for an excellent product at a fair price.

[CN ed. note: Want more information concerning DOTS PERFECT, including installation hints, etc? Pick up the April edition of HANDS-ON ELECTRONICS at your favorite newsstand.]

[Reprinted from the MAR87 edition of the Eugene ACE newsletter.]

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PASCAL (Continued from Page 56).

```
BEGIN (*PROGRAM PrFile*)
 Rewrite(Printer,'P:');
 Initialize;
   IF (Answer='Y') OR (ANSWER='y') THEN
   Convert
   ELSE
   NoConvert;
END. (*PrFile)
```

ST DISK LIBRARY PROGRAMS

Review by Ed Seward

Have you wondered which disk or disks a particular file was on? Or how about trying to organize a list of your disk files? If you answered yes to either of the questions, then a disk library program should be very helpful. I am going to take a look at four disk library programs: *DISKCAT* by Matt Leber; *FDI* (Floppy Disk Indexer) by Rod Waehner; *Disk Library* from Classic Image; *Super Directory* from Michtron.

Please note that ONLY *DISKCAT* and *FDI* are public domain. Both *FDI* and *DISKCAT* are in the Current Notes ST Disk Library; *FDI* is on disk #63 and *DISKCAT* is on disk #132.

FDI
(Public Domain by Rod Waehner)

FDI was the first public domain library program for the ST. For each file this program keeps track of: a description, path, date, time, size, date added to the library, comments, source of the file and the type or category of the file. There are two choices for indexing; disk ID and filename. The only controls over the printer output are choice of indexing and where the listing starts. The printout can be stopped by pressing "Q".

The commands supported by *FDI* are: "Add" to manually enter a filename or disk; go to the "Beginning of File" as determined by the index being used; "Delete this record"; "End of File"; "Find" a filename or diskname; "Index" is used to read in a modified disk that is already in the database or to add a new disk; "List" filenames to screen; "Next Entry" goes to the next record as determined by the current index; "Output to printer" starts the output to the printer at the current record; "Previous Entry"; "Quit"; "Switch prime index"; "Update this entry" allows one to edit a record; "View Disk Directory" closes open files and prompts for the disk to be viewed.

The one negative area of *FDI* is it's heavy disk access which slows things down. I do have to say that that *FDI* is the best of the public domain or shareware disk library programs and a lot of people will be more than happy with it.

DISKCAT
(Shareware by Matt Leber)

This program keeps track of the filename, comment and disk number for each file. As with *FDI*, the sort options are filename and disk ID. While this program doesn't store as much information for each file as the other programs, it is the only one of the four that prints out disk labels.

If you don't care about file size, time and date of creation or the path to a file and just want to keep a list of files with brief descriptions, then this is probably the program for you -- especially with the ability to print out disk labels. However, I feel I need all that information and didn't use *DISKCAT* very much. I must point out that the menus are set up so that the program is very easy to use.

DISK LIBRARY
(Classic Image)

DISK LIBRARY has been out about a year. It doesn't have as many features as *FDI* or *SD* (Super Directory), but *DISK LIBRARY* is GEM based and very easy to use. *DISK LIBRARY* keeps track of the files, folders and disk volume names. There are four display and print options: disk volume names only; sub-directories only; filenames only and all (volume names, folders and filenames). The only way to view the paths for the various files is by disk using the "all" option mentioned above. The sort options are the same as those available on the desktop: date, name, size and type. To differentiate between filenames, folders and volume names *DISK LIBRARY* uses different text styles and symbols.

DISK LIBRARY is the only one of the four programs that has the disk delete command. Another nice feature of *DISK LIBRARY* is the option to use one-key commands or the mouse and the GEM menu bar.

There are several things I don't like about this program. First, the print options are limited. (I thought they were 'ok' until getting *Super Directory* to review.) The reliance on disk volume names to distinguish between disks is too inflexible for me. *DISKCAT* and *FDI* number the disks in sequence, while *Super Directory* prompts for a four character id. I mentioned earlier the only means of printing filenames and keeping track of what folder they are in and which disk they are on. The other three programs allow one to do a complete alphabetic listing of the files and identify which disk that file is on at the same time.

SUPERDIRECTORY
(by Michtron)

As with the other commercial disk library program *SUPERDIRECTORY* is GEM based. Rather than use keystrokes to enter commands, one clicks on the desired button on the right side of the screen. There are numerous sorting options. There is a find command that allows for wildcards. Through the find command one can print out a list of just the desired files. This is great for listing say just your TNY or Pascal source code files. On a one meg ST this program allows for over 9900 records.

The sort and find options in *SUPERDIRECTORY* are fabulous. One can sort on ANY field in the record: filename, extension, category, disk, size, time, date or remarks. When one clicks on the 'Sort' command, a dialog box asks the user to select the field on which the sort is to be based and allows one to limit the sort to the files on each disk or all the files in the database. A sort of 2,400 entries is done in three or four seconds with a slide bar to show how far along the sort is. Similarly, when one clicks on the 'Find' command a dialog box requests that the desired pattern(s) be placed in the proper field(s). Wildcards are supported and make this a great way to list all the files that are related in a particular way or to just plain find a file whose name one isn't sure of.

In using *SUPERDIRECTORY* I have run into one nasty problem, one inconvenient lack and something I wish it had. The nasty problem is the inability to access a path that won't fit the path field (24 characters). An alert box is displayed with the message that "x subdirectory(s) not ADDed because pathname limit of 24 characters was exceeded. See manual for details". The manual makes NO reference to this limit or problem. In fact, the limit is such that if one uses all the characters available in naming their folders, they will NOT be able to read any of the second or lower level folders. The second level alone would require one more character than is allowed. This is the only disk library program I've seen with this quirk. The proper way to do this would be to truncate the path to fit the field or better yet to display a dialog box and allow the user to edit the path down to 24 characters. This was the only big boner I found in *SUPERDIRECTORY*. The inconvenient lack in my opinion is not having a delete disk command. (By this I mean a command to delete all the entries for a particular disk.) This results in one having to delete a disk record by record and on a disk with 50 or 60 files well... The one additional feature I wish *SUPERDIRECTORY* had is the option to send the printout to disk. (To be fair, I should mention that none of the programs have this feature.) My reasoning for this is that user groups could send/sell disks containing a listing of their disk library. These lists could even be transferred to dBMAN if one so wished.

In Summation

If Michtron were to take care of those problems I mentioned, then I think *SUPERDIRECTORY* would be unbeatable and a must for those that like a lot of options and most definitely user group disk librarians. While I already find the program to be very helpful, the limit on paths it can read prevents me from selecting it as the best library program available. The average user will more than likely be very happy with *FDI* or *DISKCAT* with *FDI* being my choice of the two.

K-SWITCH
An Effective Tool

Review by Donald Lyles

Multi-tasking, the simultaneous running of more than one program, is not possible with the ST. Yet with the arrival of K-SWITCH, the next best thing is achieved. K-SWITCH will allow the user to switch back and forth between two programs resident in memory. It is best employed for operations in which two programs are used in close association with each other; for example a word processing program and a data base program containing mailing addresses or a spreadsheet and a graphics program.

In order to get K-SWITCH up and running it must be installed from the desktop. Once it is installed you open the first program with which you wish to work. Thereafter, by merely pressing both shift keys plus the alternate key K-SWITCH will flip you back to the desktop where a second program can be opened. After the second program is opened it is then possible to switch back and forth between the two by merely pressing both shift keys and the alternate key simultaneously. Switching back and forth between the two programs will return you to the same point in the respective program at which you were when you departed it.

Additionally, K-SWITCH features a ramdisk that can be used independently or commonly between the two programs resident in memory. Note: Making any changes to a file in the ramdisk via the first program will also alter the file in the ramdisk addressed by the second program.

One excellent application of K-SWITCH that I have found is in using it as a writer's tool. It allows me to switch between the software that I am reviewing and the draft which I am writing on my word processor. This speeds up the drafting time and allows me to check functions of the software program and immediately commit them to print.

Although K-SWITCH can be used effectively with a 520ST, you obtain maximum potential when you have an upgraded 520 or 1040. This provides space for those programs which require more memory.

K-SWITCH will not operate with programs that take up the entire memory map for operation nor programs that are run on a boot disk. K-SWITCH is published by Kuma Computers Ltd. of Berkshire, England. Give it try. You'll be surprised at the little flurry of excitement that seizes you, when you hit the keys, and snap, there you are in the middle of another program, e. g. from *WARZONE* to checkbook balancing, when your wife asks, "What are you doing in there?"

BOOTING UP ATARIFEST '87

Saturday, October 10; Fairfax High School

This year, ATARI CORP. will be joining us to set up their traveling tent and show their latest offerings -- MSDOS ATARI PC, MEGA ST4, ATARI ST DESKTOP PUBLISHING, as well as new software. Plans are being formulated for additional activities with the ATARI personnel that weekend. Chair persons of Atarifest areas will be invited free.

Third party software and vendors have been an important part of Atarifest. Palmer Pyle will again be coordinating them. If you want a particular vendor to be invited to the fest, call Palmer now. These vendors are already booking fall shows and we need to contact them now.

Many of the WAACE clubs will be helping Novatari with the fest. The AURA and WACUG will be setting up the 8-bit rooms to show utilities, home productivity, and general joy of using the most economical computer. SMAUG and FACE will provide relief workers in our various rooms so that regular workers can get out to see the fest also. (No need for you to be shy about volunteering.) Even our neighborhood groups are getting in line to help. The Novatari Sterling chapter is providing a MAGIC SAC ROOM with Jeff Greenblatt and David Small to attend. Each user group may have its own room to recruit new membership and to display its library. Other user groups wishing to participate should contact Georgia Weatherhead.

The ST ROOMS will be sponsored by VAST. David Gavlin, the new president of VAST, will be appointing a chairman of the ST displays. The ST is the main thrust now and these rooms will have a lot of activity.

ATARI COMPUTER LANGUAGES will be discussed by writers accustomed to those languages. Ken Whitesell is chairman of this room.

The MIDI ROOM was a big hit last year. Mike Lehr will again be chairing this room. Other kinds of ATARI music is requested for this year's demonstrations.

The TELECOMMUNICATIONS ROOM will be set up with a BBS demonstrating how both ends of the BBS work. Who better to chair this room but our own sysop, Ted Bell? His expert co-chairs will be Bruce Blake, Ed Seward, and Gary Purinton. This is an excellent chance to learn how to access a board with expert help on selecting modems and the software. ATARI's 1200 baud modem should be available too.

Last year the multitude of attendees overloaded our facilities. This year we have gained access to the whole school to handle the crowds. The physical arrangements will be carefully considered by Margot Greig and Gary Purinton. They will be needing sign makers, strong men and women, and runners to help with the traffic flow inside the building.

Cleanup will be directed by Ed Seward, who will take a poloroid shot of the class rooms before, so that the rooms will look the same after. Extra custodial staff will be hired to clean, but help will still be needed to put desks back in place. We want our host school to be happy. They make their profits with the Booster Club providing food for our enthusiasts and spectators.

All chair persons are to report their needs and achievements to RANDY INGALSBE 703-644-0159, who will be coordinating all information about the Atarifest. He should be apprised of every detail. Then, if workers volunteer, he will know where they can best be used. The advertising chairs and publicity chairs can get information from him.

Opportunites to attend an affair with ATARI personnel still exist. The above mentioned people and others that indicate now that they will chair other areas will be included free at an affair with the ATARI people that weekend. Below are areas still needing chair persons.

The GAME ROOM is to have a different look this year. Since it collects the children, let it be a chance for them to play games up to 15 minutes for a quarter. The chair would arrange machines and collection. Is there a group of younger members to chair this? Or maybe a users group?

REGISTRATION is a challenge with the exits and entrances to the High School. A chairman is needed as well as ideas of how this can really be effective. It might be tied up with the door prizes. We have never had an accurate account of attendance.

PUBLICITY has been handled in years past by our co-producer, Fairfax County Adult Education (FCAE). It is because of our relationship with the Adult Education that we have gotten the use of Fairfax High School, which is larger and less expensive than any hotel in the area. Someone, however, needs to write the press releases. The FCAE has 120 press sources. This needs to be accomplished before August.

ADVERTISING will have a budget this year. Besides the 120 press releases, national BBS notices, and Current Notes ads which attract ATARI users, there will be paid ads in newspapers to attract new people to see how the ATARI functions. Writing and placement of the ads are the duties of this chair.

If you have other ideas for individual rooms, call the above chair persons. If there are ideas for new areas, call Randy Ingalsbe. If volunteering for chair positions or as a general worker, call Randy Ingalsbe 703-644-0159.

Georgia Weatherhead

NORTHERN VIRGINIA ATARI USERS' GROUP (NOVATARI)

President	G. Weatherhead.	(703) 938-4829
VP-ST	David Gavlin...	(703) 820-9543
VP-8-bit	Gary Purinton..	(703) 476-8391
Treasurer	Curt Sandler...	(703) 734-9533
Secretary	Bob Zimmon.....	(703) 476-5924
Public Relations	Gary Scott.....	(703) 590-1906
Membership	Earl Lilley....	(703) 281-9017
Acquisitions	Palmer Pyle....	(703) 437-3883
Program Managers		
Main Meeting	Alan Friedman..	(703) 425-0575
ST Meeting	Ian Charters...	(703) 845-7576
Disk Librarians		
8-bit	Evan Brooks....	(703) 354-4482
ST	Allen Clarke...	(703) 250-4469
Public Domain Disk Editors		
8-bit	Roy Brooks.....	(703) 750-0146
ST	Ed Seward.....	(703) 573-3044
MIDI Keyboard	Mike Lehr.....	(703) 931-9947
Other SIGs		
Beginners SIG	Gary Purinton..	(703) 476-8391
Telecom SIG	Ted Bell.....	(703) 455-5312
	Ed Seward.....	(703) 573-3044
ST Programmers	Ken Whitesell..	(703) 636-4756
MS DOS SIG	Mike Gibbons...	(703) 440-0380
SYSOP	Ted Bell.....	(703) 455-5312
Bulletin Boards		
8-bit	ARMUDIC.....	(703) 569-8305
ST	WAACE ST.....	(703) 569-3227
Fest'87 Info	Randy Ingalsbe.	(703) 644-0159
HOTLINE	Andrea Bonham..	(703) 534-3503

****
* BBS fee information: *
* NOVATARI & NCAUG members.....$5.00/year *
* other WAACE members.....$7.50/year *
* Make checks payable to NOVATARI and send to: *
* Ted Bell, 9705 Shipwright Ln, Burke VA 22015 *
****

NEW MEMBERS: Dues are $20/year which includes a subscription to Current Notes. Join at the main meeting, chapter meeting or by sending $20, payable to NOVATARI, to Earl Lilley, 821 Ninovan Road SE, Vienna, VA 22180.

LOCAL NOVATARI CHAPTERS

Mt. Vernon / Hybla Valley meets the first Thursday of each month at 7:30. Contact Ron Peters at 780-0963.

Sterling meets in Sterling Library from 7:30-9:30 on the 1st Wed. of the month. Contact Wayne Wilt 437-6159.

Vienna meets in room 10 at the Vienna Elementary School, 128 Center St. SW from 7:30 - 9:00 on the third Wednesday of the month. Contact Dave Heagy at 281-9226.

NOVATARI MAIN MEETING is at the Washington Gas Light Building, 6801 Industrial Road, Springfield, VA. Meetings are usually held the second Sunday of each month. Take 495 to east on Braddock Rd (620) to south on Backlick Rd (617). Left on Industrial Rd (by a light with a Texaco station on the corner). Washington Gas Light is the second building on the right (big parking lot, go right in the front door).

TIME PERIOD	BIG AUDITORIUM	SMALL AUDITORIUM
5:30 - 6:00	Beginners SIG	Telecom SIG
6:00 - 7:00	Speaker or Demo	- N/A -
7:00 - 7:30	Business & Open Forum	- N/A -
7:30 - 8:30	8-bit SIG	ST SIG (VAST)*

* ST SIG also meets at Washington Gas Light from 5:30 - 9:30 on the fourth Sunday of the month.

PRESIDENT'S REPORT
by Georgia Weatherhead

NEW NAMES on the Novatari board. Welcome David Gavlin, the new ST VP. David will do the organizational work keeping the ST and Novatari Board in touch. Terry White has moved to Maryland, but we expect him to attend our ST meetings often lending his expertise and ready wit.

Andrea Bonham and her daughter will greet you when you call for help. They will be keeping the HOTLINE available and current. Call if you need to talk or if you want to add your name to those that will help others. Especially needed are individuals that can help with VIP, DBMAN, Light pens, joysticks, paddles, HOMEWORD, ANCHOR, MARK 7, MODULA-2 and (301) volunteers in every section. See March CN page 60 for last printed list.

Randy Ingalsbe will be coordinating all information about the Atarifest to be held in October. Any chairperson should report plans to Randy. Anyone wanting information should call him. See more about the 'Fest' elsewhere in this issue.

ANALOG subscriptions and renewals will be taken by Curt Sandler, treasurer, at the May meeting. It is through our subscription that the library is able to carry the ANALOG disks. The way you get documentation is to have a subscription.

Ray Daly and Stephen Ford showed very inexpensive disks for the 8 bits available at DISKCOVERY. They are even more inexpensive when the Caps win by a large margin. DISKCOVERY is moving to larger quarters in Seven Corners. Look for Sales.

HAPPY MOTHER'S DAY. This is why you haven't missed the Novatari meeting. The meeting is scheduled for May 17, the third Sunday, so that you may be with your moms. John Baum will give us tips on the care of printers and disk drives, advice all of us can use.

Last month in Current Notes the upcoming meeting dates were listed. In case you are a new subscriber, the dates are May 17, June 14, July 12, August 9. Put these on your calendar. Visitors from other clubs are welcome. Prospective members are welcome. There is room for all.

I have made a promise to have a large screen showing soon. It is time we see what is on the monitors at our meetings.

ATARI USERS REGIONAL ASSOCIATION (AURA)

President.....	John Barnes.....	301-652-0667
Vice President...	Barry Marcus.....	301-926-3660
Treasurer.....	Mo Sherman.....	301-563-1097
Membership Chmn..	Richard Stoll....	301-946-8435
Educ. Liaison....	Bill Schadt.....	301-622-1547
Disk Libr.(XL/XE)	Bill Frye.....	301-345-4336
Disk Libr (ST)...	Jeff Kellogg.....	
Public Relations.	Richard Stoll....	301-946-8435
Used Equip Sales.	Lincoln Hallen...	301-460-5060

MEETINGS1st Thursday (May 7). 7:00 pm (library sales). 7:30-9:00 pm (Program) in the Temple Israel Social Hall. Temple Israel is located in Silver Spring, MD at 420 E. University Blvd. between Colesville Rd (Rt 29) and Piney Branch Rd (Md Rt 320).

CORRESPONDENCE: All correspondence, including NEW MEMBERS, membership renewals, changes of address, etc. should be sent to: AURA, P.O. Box 7761, Silver Spring, MD, 20904. AURA cannot guarantee Current Notes subscription fulfillment unless the member provides written confirmation of address changes, renewals, etc. Annual Dues are $20.

AURA REPORT FOR APRIL 87

1. Meetings - Our next meeting will be March 5th (the first Thursday).

2. Meeting plans - Vice President Barry Marcus is responsible for coordinating meeting agendas. Please contact Barry to get on the agenda. Whenever possible we will coordinate demonstrations so that similar 8 and 16 bit products will be featured.

3. Member Survey - Barry Marcus is conducting a survey of hardware owned by AURA members. The results of this survey are being used to assist in program planning. Please contact Barry if you have not yet participated.

4. 8-bit Library - Bill Frye demonstrated "Games to Drive Away the Winter Chill", a collection submitted by Tom Jarrell. We are still working on the "starter kit". Georgia Weatherhead of NOVATARI sent us a disk of LOGO programs and Walter Jones has agreed to review them. I recently gave oone of my (two) eight-bit systems to my nephews. Please let me know of any wonderful material that you have for pre-schoolers.

5. 16-bit Library - Jeff Kellogg has order forms for members who want to obtain material from the 16 bit library. Jeff now has almost all of the Current Notes Disks. AURA will be reassembling some items into disks organized along functional lines. Send Jeff an order form for the disks you want and then pick them up at the next meeting. There are too many disks in the library to allow us to provide anything better than pot luck for spot sales.

6. 8 bit demo - Jim Folsom demonstrated "MAIL ORDER MONSTER", a graphics combat fantasy game produced by Electronic Arts (cost: $15 or less). The game has been out for the Commodore 64 for a year or so, but has only recently been adapted to Atari. The name comes from the fact that you can build "monsters" with various attributes and see how well they stack up against the computer's resident monster.

6. 16 bit demo - Mo Sherman showed us Donald Duck's Playground, a game that teaches the value of money, hard labor, and recreation.

7. Educational Liaison report - Bill Schadt reports that the kids are having a ball with Publishing Partner and that LOGO has found extensive use.

8. WAACE BBS - The ARMUDIC BBS now available to 8-bit owners who are members of WAACE clubs on the same subscription basis as the WAACE ST board. I do not have any direct knowledge of the traffic pattern, but I am confident that Ted Bell and his helpers have done a fine job. At these prices there is no reason why you cannot be hooked into a vital network of Atari users. I have found the level of discourse to be fairly high. The boards serve other interests besides downloading software.

9. MEMBERSHIP - AURA dues are now $20 per year for Regular Members and $5 for Library members. Regular Member dues include 10 issues of Current Notes magazine. We are discontinuing the practice of sending out one copy of Current Notes past the expiration date. We mailed 221 copies of Current Notes for April 87.

10. AURA Roster - Copies of the AURA roster are available at meetings or by written request to Richard Stoll (enclose a self-addressed stamped envelope).

NATIONAL CAPITAL ATARI USERS' GROUP (NCAUG)

President..... Peter Kilcullen.. 202-296-5700
Vice President... Mike Pollak..... 703-768-7669
Treasurer..... Allen H. Lerman.. 703-460-0289
XL/XE Librarian.. Mike Pollak..... 703-768-7669
ST Librarian..... Enrique Seale.... 202-295-0112

MEETINGS: 3rd Tuesday, 5:30 - 8:30 pm, room 543, National Science Foundation offices, 1800 G St., NW, Washington, DC. Closest subway stop is Farragut West on the Blue and Orange lines. Building is identified by sign for Madison National Bank on the corner. Front entrance is on west side of 18th between F and G.

NEW MEMBERS may join at meeting or send $20 check, payable to NCAUG, to Allen Lerman, 14905 Waterway Drive, Rockville, MD 20853. Membership includes a subscription to Current Notes.

WOODBRIDGE ATARI COMPUTER USERS' GROUP (WACUG)

President..... Jack Holtzhauer.. 703-670-6475
First VP..... Arnie Turk..... 703-670-2547
Board Member..... Bill Parker..... 703-680-3041
Board Member..... Lou Praino..... 703-221-8193
Board Member..... Darrell Stiles... 703-494-9819
Treasurer..... Curtiss Pieritz.. 703-494-3704
Secretary..... Frank Bassett, Jr 703-670-8780
Librarian..... Charles Stringer. 703-786-8755

MEETINGS: 3rd Tuesday 7-10PM, Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. ST SIG meetings: SUN MAY 17th 2-5PM; MON JUN 22nd 6-10 PM. Entering Woodbridge from either North or South on Route #1, proceed to the intersection of Route #1 and Opitz Blvd. (opposite Woodbridge Lincoln-Mercury). Turn West on Opitz and take first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building.

NEW MEMBERS: Initial membership fee is $10/yr plus $1 monthly dues. Join at meeting or send check, payable to WACUG, to Frank W. Bassett, Jr., 15313 Blacksmith Terrace, Woodbridge, VA 22191.

SOUTHERN MARYLAND ATARI USERS' GROUP (SMAUG)

President..... Thomas Crosby.... 301-843-1310
Sec/Disk Lib..... John J. Smith.... 301-862-9490
Treasurer..... Samuel Schrinar.. 301-843-7916
Newsletter Ed.... Leroy Olson..... 301-743-2200

MEETINGS: 2nd Thursday, 7:30 pm, John Hanson Middle School in Waldorf, MD. Take MD Route #5, proceed about 1/2 mile East of the intersection of Route 301 and take first left past the Kinney show store to school.

NEW MEMBERS may join at the meeting or send $20 check, payable to SMAUG, to Sam Schrinar, 2032 Alehouse Court, Waldorf, MD 20601.

NAMELESS ATARI USERS GROUP (NAUG)

President..... Dana O'Hara..... 301-798-0566
Bulletin Board... California BBS... 301-263-8776

MEETINGS: 2nd Sun. each month unless otherwise specified in Davidsonville, MD (suburb of Annapolis) 1:30-4:30 pm at residence of Dana O'Hara (3475 Manassas Ct.).

NEW MEMBERS: Join at meeting. Dues are $20 per year and include a subscription to Current Notes.

FREDERICK ATARI COMPUTER ENTHUSIASTS (FACE)

President..... John Maschmeier.. 301-271-2470
Vice President... Mike Kerwin..... 301-845-4477
Treasurer..... Buddy Smallwood.. 301-432-6863
Librarian..... Jason Hamon.....
Secretary..... Bill Mentzer.....
SYSOP..... Chuck Grasser.... 301-831-9092
Bulletin Board..... 301-865-5569

MEETINGS: 4th Tuesday, 7 - 9:30 pm, Walkersville H. S., MD Route 194, 1 mile north of MD Route 26 (Liberty Rd).

NEW MEMBERS: Dues are $25/year/family. Join at meeting or send check, payable to FACE, to Buddy Smallwood, P.O. Box 300, Keedysville, MD 21756.

SECRETARY'S REPORT: At the April meeting, Mike Kerwin showed *ALLADIN* for the 8-bit. Buddy Smallwood showed *DEGAS ELITE* for the 16-bit and Bill Mentzer showed *KING TUT'S TOMB*.

At the May Meeting, Chris Bigelow will show how to use *850 EXPRESS* on the FACE BBS. Buddy Smallwood will show how to use GEnie, and the game *SDI* for the 16-bit.

<> To join any of these clubs, or to RENEW your membership, send your club dues to the club of your choice -- see the information listed under each club's NEW MEMBERS section. DO NOT SEND CLUB RENEWALS TO CURRENT NOTES. <>

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Degas Elite....$49.50	Call for other ST prices	Mouse Pad....$9.95
Timeworks ST....$49.50 each	Panasonic 1080i printer....$217	5.25" Disk File/120....$12.95
Invitation to Programming	130XE,1050,1027....$129.99 ea.	3.5" Disk File/30....$8.99
series for 8 bit....$7.99 each	Avatex 1200HC....$117.50	TDK 3.5" SS/DD....$13.75
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